



**CITY OF PHILADELPHIA  
MUNICIPAL WASTE MANAGEMENT PLAN  
2018 - 2027**

**APPENDIX  
- PART 2 -**



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# City of Philadelphia



(Bill No. 140903)

## AN ORDINANCE

Amending Title 10, entitled "Regulation of Individual Conduct and Activity," of The Philadelphia Code, by adding rules regarding use of dumpsters; all under certain terms and conditions.

*THE COUNCIL OF THE CITY OF PHILADELPHIA HEREBY ORDAINS:*

SECTION 1. Subsection (4) of § 10-722 (Use of Dumpster) is hereby deleted in its entirety.

SECTION 2. Title 10 is hereby amended as follows:

TITLE 10. REGULATION OF INDIVIDUAL CONDUCT AND ACTIVITY.

\* \* \*

§ 10-722. Use of Dumpsters

\* \* \*

*(4) Duties of Licensees.*

*(a) Licensees shall use dumpsters in compliance with all applicable provisions of § 10-724 ("Commercial Sector Waste Management and Recycling") and all other laws relating to recycling. No licensee shall place, or allow to be placed, any refuse in a dumpster licensed as a recycling dumpster other than materials designated by the provider as recyclable.*

*(b) No dumpster shall be used if a medallion is not properly affixed or if the licensee knows that the medallion is not operational. The licensee shall obtain a replacement medallion for a non-working medallion, which shall be affixed to the dumpster, before the dumpster is put back into use.*

*(c) Dumpster Maintenance.*

*(1) Any dumpster on private property that is located outdoors shall be enclosed according to regulations issued pursuant to Title 4, Subcode B, Section B-424 of this Code.*

# City of Philadelphia

BILL NO. 140903 continued

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(2) Licensees shall keep dumpster lids tightly secured except when in use, or when the dumpster must be open to accommodate a trash chute, and shall keep the area around the dumpster clean and free of any refuse, non-grindable garbage, spillage or overflow.

(d) *Grindable and Non-Grindable Garbage.*

(1) Licensee shall not mix grindable garbage with rubbish. Licensee shall dispose of grindable garbage in garbage disposal units or arrange for private collection of grindable garbage for composting, anaerobic digestion, or use as farm livestock feed. This subsection shall not apply to multi-family residential licensees.

(2) Licensees may mix non-grindable garbage with rubbish provided all garbage is placed in bags designed to hold garbage without leaking or in other sealable containers designed to hold garbage before placing it in a dumpster.

(3) For the purposes of licensing, dumpsters or other containers used solely for private collection of garbage for composting or used as farm livestock feed shall be considered recycling dumpsters.

(e) *Collection.*

(1) Licensees shall arrange to have a dumpster emptied at least once every week unless it contains garbage, in which case the dumpster shall be emptied twice a week or more often if required by the Department or by order of the Health, Fire, Police, or Streets Departments.

(2) Aerated dumpsters specifically designed to prevent odors resulting from the anaerobic decomposition of food waste shall be emptied within 24 hours of being full or more often if required by the Department or by order of the Public Health, Fire, Police or Streets Departments.

(3) Compacting dumpster not containing garbage shall be emptied within 24 hours of being filled to its maximum capacity or more often if required by the Department or by order of the Health, Fire, Police, or Streets Departments.

\* \* \*

(5) *Duties of Providers.*

\* \* \*

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BILL NO. 140903 continued

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(d) *A provider shall notify a licensee in writing within 24-hours of changing a dumpster.*

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**Explanation:**

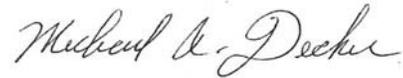
*Italics* indicate new matter added.  
[Brackets] indicate matter deleted.

# City of Philadelphia

BILL NO. 140903 continued

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CERTIFICATION: This is a true and correct copy of the original Bill, Passed by the City Council on February 19, 2015. The Bill was Signed by the Mayor on March 4, 2015.



Michael A. Decker  
Chief Clerk of the City Council

# City of Philadelphia



(Bill No. 150748)

## AN ORDINANCE

Amending Chapter 10-700 of The Philadelphia Code, entitled “Refuse and Littering,” to make changes relating to: City collection of waste; separation of recyclable materials from other waste for City and private collection; private collection of waste for those not eligible to receive City collection; planning, reporting, education and signage requirements applicable with respect to certain regulated premises; providing for penalties and enforcement; and making technical changes; all under certain terms and conditions.

WHEREAS, Act 101 of 1988 requires municipalities to implement source-separation and collection programs for recyclable materials for both residential and commercial properties; and

WHEREAS, Act 101 also requires counties to update their Municipal Solid Waste Management Plan every 10 years; and

WHEREAS, Counties are required to appoint a citizens’ Solid Waste and Recycling Advisory Committee to provide input and recommendations regarding development of the Municipal Solid Waste Management Plan; and

WHEREAS, The Solid Waste and Recycling Advisory Committee has expressed its support for increasing recycling participation and diversion, particularly in the commercial sector; and

WHEREAS, Council supports the Mayor and the Streets Department’s efforts to develop and maintain sustainable recycling programs and consider the advice of the Solid Waste and Recycling Advisory Committee related to certain recycling and solid waste management policies and programs; and

WHEREAS, Removing certain materials from the municipal waste stream will decrease the flow of solid waste to disposal, aid in the conservation and recovery of valuable resources, conserve energy in the manufacturing process, and increase the supply of reusable materials for the Commonwealth's industries; and

WHEREAS, It is in the public interest to reduce and minimize contamination of recyclable materials; and

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BILL NO. 150748 continued

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WHEREAS, Due to changes in the composition of the municipal solid waste stream and changes in paper and packaging, additional materials, including organics, need to be considered for recycling in order to improve diversion rates; and

WHEREAS, The Streets Department is conducting a study to determine the economic and operational feasibility of organics recycling; now, therefore

*THE COUNCIL OF THE CITY OF PHILADELPHIA HEREBY ORDAINS:*

SECTION 1. Section 10-701 of The Philadelphia Code is amended as follows:

§10-701. Definitions. In this Chapter the following definitions apply:

\* \* \*

*(4.1) Debris. Any material resulting from the construction or demolition of any structure, including wood, stones, bricks, rocks, concrete, gravel or earth.*

*(4.2) Department. The Department of Streets.*

\* \* \*

*(8.1) Municipal Waste or Waste. Any Garbage, Rubbish, Debris, refuse or industrial, lunchroom or office waste and other material, including solid, liquid, semisolid or contained gaseous material, resulting from operation of residential, municipal, commercial or institutional establishments and from community activities, but not including Recyclable Materials.*

\* \* \*

*(10.1) Operator. The owner of, and any person in control of, any Regulated Premises.*

\* \* \*

*(11.1) Private Business Receptacle. A receptacle placed by a private commercial business owner or manager at or near his or her business location for the reception of litter, including newspapers and commercial and non- commercial handbills.*

\* \* \*

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BILL NO. 150748 continued

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*(14.1) Recyclable Materials. Materials designated by regulation that would otherwise be disposed of or processed as Municipal Waste but which are appropriate for separation for future recovery and sale or reuse.*

*(14.2) Regulated Premises. Premises where Waste is generated, including each separate unit in a multi-unit building or complex of buildings, such as a portion of a property used for commercial purposes in a multi-use building; provided that, with respect to any residential unit within a multi-unit building or complex of buildings at which the building manager, owner, condominium association or other management entity arranges for collective removal of Waste, the building or complex of buildings as a whole, and not individual residential units thereof, shall be considered the Regulated Premises. Regulated Premises does not include exclusively residential buildings with six or fewer dwelling units.*

\* \* \*

[(18) Debris. Any material resulting from the demolition of any structure, including stones, bricks, rocks, concrete, gravel or earth.

(19) Private Business Receptacle. A receptacle placed by a private commercial business owner or manager at or near his/her business location for the reception of litter, including newspapers and commercial and non-commercial handbills.]

SECTION 2. Section 10-717 of The Philadelphia Code, entitled “Source Separation, Collection, and Disposal of Refuse,” is repealed in its entirety and replaced with the following:

*§10-717. Collection of Municipal Waste and Recyclable Materials.*

*(1) Except as otherwise permitted in the Code, no person shall place Municipal Waste or Recyclable Materials in the right-of-way or at a pick-up location for City collection except pursuant to collection regulations established by the Department, which regulations may include provisions pertaining to:*

- (a) designated collectible Municipal Waste materials;*
- (b) the separation of Recyclable Materials from Municipal Waste;*
- (c) designated Recyclable Materials, including, but not limited to paper (including mixed paper and office paper), plastic bottles and containers, aluminum, steel and bi-metallic cans, corrugated cardboard, glass bottles and jars, and leaves;*
- (d) approved containers;*

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- (e) *limits on quantities;*
- (f) *weights of containers;*
- (g) *dates and times for set-out; and*
- (h) *such other areas of regulation as the Department shall deem necessary.*

(2) *All owners and persons in control of any premises shall separate out any designated Recyclable Materials from Municipal Waste set out for City collection.*

(3) *Private Collection. Every Operator of Regulated Premises not eligible for collection pursuant to this Chapter or the regulations adopted hereunder, and every Operator of Regulated Premises eligible for City collection services but for which City collection is not used, shall contract with one or more private haulers for the collection of Municipal Waste and Recyclable Materials in accordance with this Code.*

SECTION 3. Section 10-718 of The Philadelphia Code, entitled “Enforcement,” is amended as follows:

§ 10-718. Enforcement.

(1) For the purposes of enforcing the provisions of this Chapter, notice of violation *under § 1-112* shall be issued by police officers, authorized inspectors within the *Department or the* Department of Licenses and Inspections, or any other person authorized to enforce [ordinances.] *ordinances; provided that, for purposes of § 1-112(3), the required amount to be remitted shall be fifty dollars (\$50), except as follows:*

(a) *For violations of § 10-711 (Handbills on Vehicles), § 10-723 (Handbills on Sidewalks, Streets and Private Property), § 10-723.1 (Removing Handbills), or § 10-723.2 (Distribution of Handbills): one hundred dollars (\$100);*

(b) *For violations of § 10-702 (Litter in Public Places), § 10-703(2) (Placing Household Refuse in a Public Receptacle), or § 10-722 (Use of Dumpsters): one hundred fifty dollars (\$150); and*

(c) *For violations of § 10-710: no stipulated payment shall be allowed.*

(2) *The Department may by regulation provide for stipulated amounts other than those provided in subsection (1)(a) and (b).*

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[(2) Whenever a police officer or any other official authorized to enforce ordinances observes a violation of this Chapter, he shall hand to the violator or leave upon or affix to the premises where the violation occurred a printed notice of violation. Such notice shall bear the date, time and nature of the violation, when known, the identity of the violator, the address of the violator or the address where the violation occurred, the amount to be remitted in response to the notice of violation, the penalty which can be imposed by the court for the violation, and shall be signed by the person issuing the notice and shall bear the police officer's badge number or other official identification number identifying the person issuing the violation notice.

(3) Any person who receives a notice of violation, except a notice of violation of § 10-702, § 10-703(2), § 10-710, § 10-711, § 10-722, § 10-723, § 10-723.1, § 10-723.2 or § 10-717.1 may, within ten (10) days, pay the amount of fifty (50) dollars, admit the violation and waive appearance before a Municipal Court Judge. Any person who receives a notice of violation of § 10-702 or § 10-703(2) may, within ten (10) days pay the amount of one hundred fifty (150) dollars, admit the violation and waive appearance before a Municipal Court Judge. Any person who receives a notice of violation of § 10-711, § 10-723, § 10-723.1, or § 10-723.2 may, within ten (10) days, pay the amount of one hundred (100) dollars, admit the violation and waive appearance before a Municipal Court Judge. Any person who receives a notice of violation of § 10-722 may, within ten (10) days, pay the amount of one hundred fifty dollars (\$150), admit the violation and waive appearance before a Municipal Court Judge. The notice of violation shall contain an appropriate statement for signature by the violator for the purpose of admitting the violation and waiving a hearing, and shall be returned by the violator when he remits the stipulated payment. No such stipulated payment shall be permitted in the case of a person who receives a notice of violation of § 10-710.

(4) If a person who receives a notice of violation fails to make the prescribed payment within ten (10) days of the issuance of the notice of violation, and, in the case of the issuance of a notice of violation of § 10-710, a code enforcement complaint shall be issued for such violation in such manner as provided by law. If the person named in the code enforcement complaint is found to have violated any provision of this Chapter or fails to appear on the date set for hearing, he shall be subject to the imposition of penalties as set forth in § 10-719, plus court costs.]

[(5)] (3) Whenever a police officer has probable cause to believe a vehicle was or is being used to violate subsection 10-710(2), the officer may seize the vehicle.

SECTION 4. Section 10-724 of The Philadelphia Code, entitled "Commercial Sector Waste Management and Recycling," is amended as follows:

§ 10-724. [Commercial Sector] Waste Management and Recycling *Requirements for Certain Regulated Premises.*

# City of Philadelphia

BILL NO. 150748 continued

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[(1) Definitions. In this Section, the following definitions apply:

- (a) **Municipal Waste.** Any garbage, refuse, industrial lunchroom or office waste and other material, including solid, liquid, semisolid or contained gaseous material, resulting from operation of residential, municipal, commercial or institutional establishments and from community activities and any sludge not meeting the definition of residual or hazardous waste in the Pennsylvania Solid Waste Management Act from a municipal, commercial or institutional water supply treatment plant, wastewater treatment plant or air pollution control facility. The term does not include source separated recyclable materials.
- (b) **Compostible Material.** Any Municipal and/or Residual Waste, organic in nature that can be composed without interfering with the composting process and that will not prevent the use of the finished compost as a soil additive. Compostible Material includes Garbage and Yard Waste and can include paper.
- (c) **Operator.** A person, including any individual, partnership, corporation, association, institution, cooperative enterprise, or governmental agency, who or which arranges for the collection and/or disposal of Municipal Waste, Residual Waste or Postconsumer Material generated at any Regulated Premises.
- (d) **Postconsumer Material.** Any product generated by a business or consumer which has served its intended end use and which has been separated or diverted from solid waste for the purposes of collection, recycling and disposition. The term includes industrial by-products that would otherwise go to disposal or processing facilities. The term does not include internally generated scrap that is commonly returned to industrial or manufacturing processes.
- (e) **Recycling.** The collection, separation, recovery and sale or reuse of metals, glass, paper, leaf waste, plastics and other materials which would otherwise be disposed or processed as municipal waste or the mechanized separation and treatment of municipal waste (other than through combustion) and creation and recovery of reusable materials other than a fuel for the operation of energy.
- (f) **Regulated Premises.** Each premises located in the City of Philadelphia which generates Municipal Waste, Residual Waste, Postconsumer Material, Compostible Material or Construction/ Demolition Material that does not receive collection services by the Department of Streets of the City of Philadelphia or receives privately contracted waste disposal

# City of Philadelphia

BILL NO. 150748 continued

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service for at least a part of its municipal solid waste stream; provided that, in any multi-tenant or condominium building or complex of buildings in which the building manager, owner, condominium association or other management entity arranges for collective removal of such Municipal Waste, Residual Waste and/or Postconsumer Material, the building or complex of buildings as a whole, and not individual units thereof, shall be considered a single Regulated Premises.

- (g) Residual Waste. Any garbage, refuse, other discarded material or other waste, including solid, liquid, semisolid or contained gaseous materials resulting from industrial, mining and agricultural operations and any sludge from an industrial, mining or agricultural water supply treatment facility, waste water treatment facility or air pollution control facility, provided that it is not hazardous.
  - (h) Source-separated Recyclable Materials. Materials that are separated from municipal waste at the point of origin for the purpose of recycling.]
- (1) *Diversion Requirements for Regulated Premises. The Operator of each Regulated Premises shall, through an on-premises diversion program, provide receptacles for collection of Recyclable Materials and a method of removal of such materials that complies with regulations of the Department and:*
- (a) *if City collection is used, provide for separation and placement of Recyclable Materials for City collection in accordance with Section 10-717 and regulations established by the Department; or*
  - (b) *if City collection is not used, provide for the removal of such Recyclable Materials by contracting with a recycling service provider.*
- (2) Regulated Premises Planning and Reporting Requirements. The Operator of each Regulated Premises shall prepare a *Solid Waste and Recycling Plan* with respect to such Regulated Premises [briefly enumerating the means which will be used to meet the recycling objectives established at Section 10-717.] *describing the means that will be used to meet the diversion requirements established in this Section.* Such *Solid Waste and Recycling Plan* shall: [contain the following information:
- (.1) The amounts of Municipal and/or Residual Waste generated at such Regulated Premises, estimated in tons per year.
  - (.2) Certification of compliance with all applicable regulations adopted pursuant to Section 10-717.

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- (.3) Description of which Postconsumer Materials will be targeted for separation from the Municipal and/or Residual Waste generated at such Regulated Premises.
- (.4) Description of how Postconsumer Materials will be separated from Municipal and/or Residual Waste.
- (.5) Indication of whether the separated recyclables are to be collected as Source-separated Recyclable Material; or whether an exemption will be sought from source-separation requirements.
- (.6) Designation of each garbage collector, private waste hauler, recyclable material collector and postconsumer material broker with which the Operator arranges for removal of garbage, waste, or recyclable material from such Regulated Premises.
- (.7) Indication of whether such Operator agrees to a release permitting the City to use recycling credits attributable to such Regulated Premises in the City's application to the Commonwealth for Performance Grants.]
  - (a) *be prepared on a form prescribed by the Department;*
  - (b) *list the Recyclable Materials to be separated from Waste at the Regulated Premises; and*
  - (c) *identify whether City collection is used and, if not, identify each hauler with which the Operator arranges for removal of Municipal Waste and Recyclable Materials.*
- (3) *Filing of Solid Waste and Recycling Plan.* The Operator shall send the Solid Waste and Recycling Plan [referred to above shall be sent] to the [City of Philadelphia Recycling Office, maintained] Department and shall maintain the Plan on file and post it in a public area at the Regulated Premises. [and shall be initially distributed, and distributed at the time of any amendment, by the Operator to residents of and persons employed at the Regulated Premises.]
- (4) *Amendment of the Plan.* [The Recycling Plan shall be amended by the] The Operator of such Regulated Premises shall, within thirty (30) days of any change in practices described therein, amend the Plan and the amended plan shall be [sent to the City of Philadelphia Recycling Office and shall be posted in a public area and available for inspection at the premises and distributed to residents and/or employees.] filed and maintained as set forth in subsection (3).

# City of Philadelphia

BILL NO. 150748 continued

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[(5)] The provisions of this Section may be enforced through the use of notices of violation in accordance with the procedures provided in Section 10-718.]

[(6)](5) *Occupant Education Requirements. The Operator of a Regulated Premises shall provide waste disposal and recycling information and instructions, in accordance with regulations established by the Department:*

- (a) *annually, to all occupants at the premises;*
  - (b) *to each new occupant no later than the thirtieth day after the person begins occupancy; and*
  - (c) *to all occupants within thirty (30) days of a material change in the Waste or Recyclable Materials removal service provided.*
- (6) *Signage Requirements. The Operator of a Regulated Premises shall ensure that containers or locations used at the premises to aggregate Municipal Waste and Recyclable Materials are marked as follows:*
- (a) *Each drop-off area or container intended or used for multi-person collection and disposal of Waste shall be prominently marked “Waste.”*
  - (b) *Each drop-off area or container intended or used for multi-person collection of Recyclable Materials shall be affixed with a sign that includes:*
    - (.1) *the universal “Chasing Arrows” recycling symbol;*
    - (.2) *the word “Recycling”; and*
    - (.3) *a written list and graphic representations of the Recyclable Materials that the operator intends to collect.*

[(6)](7) Penalties. \* \* \*

SECTION 5. Section 10-726 of The Philadelphia Code, entitled “Disposal of Curbside Refuse, Rubbish, Garbage and Recyclable Materials,” is amended as follows:

§ 10-726. [Disposal of Curbside Refuse, Rubbish, Garbage and Recyclable Materials]  
*Set Out Times For City Municipal Waste and Recyclable Materials Collection.*

[(1)] Regulations. The Department of Streets may promulgate regulations for the proper disposal of refuse, rubbish, garbage and recyclable materials, set out at curbside or other pick-up locations for collection by the City or any other

# City of Philadelphia

BILL NO. 150748 continued

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collector. This Section is not intended to apply to disposal or collection regulated under Section 10-710 (Dumping of Debris and Short Dumping), 10-722 (Use of Dumpsters) or 10-724 (Commercial Sector Waste Management and Recycling).]

[(a)] (1) Notwithstanding any regulations to the contrary, [refuse, rubbish, garbage and recyclable materials,] *Municipal Waste and Recyclable Materials* set out for [daytime] City collection, shall be placed *out* [on the sidewalk adjacent to the curb at the front of the premises] *for collection*, as follows:

[(.1)] (a) From October 1st through March 31st, before 7:00 AM on the day of collection, but not before 5:00 PM on the previous day.

[(.2)] (b) From April 1st through September 30th, before 7:00 AM on the day of collection, but not before 7:00 PM on the previous day.

(2) Enforcement. Enforcement of this Section shall be pursuant to Section 10-718, except as follows:

(a) All notices of violation shall bear, in addition to the requirements of Section [10-718(2)] *10-718*, a statement indicating whether evidence containing the address of the property in violation was found among the refuse, rubbish, garbage or recyclable materials.

\* \* \*

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**Explanation:**

[Brackets] indicate matter deleted.  
*Italics* indicate new matter added.

# City of Philadelphia

BILL NO. 150748 continued

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# City of Philadelphia

BILL NO. 150748 continued

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CERTIFICATION: This is a true and correct copy of the original Bill, Passed by the City Council on December 10, 2015. The Bill was Signed by the Mayor on December 23, 2015.



Michael A. Decker  
Chief Clerk of the City Council

# City of Philadelphia



(Bill No. 150651)

## AN ORDINANCE

Amending Title 4 "The Philadelphia Building Construction and Occupancy Code," of The Philadelphia Code, by amending Subcode "P," (The Philadelphia Plumbing Code) by adding new requirements for food waste grinders in some new residential construction; all under certain terms and conditions.

*THE COUNCIL OF THE CITY OF PHILADELPHIA HEREBY ORDAINS:*

SECTION 1. Subcode P of Title 4 is amended to read as follows:

### TITLE 4. THE PHILADELPHIA BUILDING CONSTRUCTION AND OCCUPANCY CODE

\* \* \*

#### SUBCODE "P" (THE PHILADELPHIA PLUMBING CODE)

##### CHAPTER 1 ADMINISTRATION

\* \* \*

#### SECTION P-106.0 PLUMBING REGULATIONS.

\* \* \*

#### *SECTION P-106.2. FOOD WASTE GRINDERS.*

##### *P-106.2.1 Legislative Findings.*

*(1) Cities around the world are increasingly focused on the challenges and opportunities associated with the generation, management and disposition of food waste.*

*(2) Food waste comprises one of the largest components of household waste.*

# City of Philadelphia

BILL NO. 150651 continued

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- (3) *Approximately 10 pounds of food waste each week is generated by the average American family.*
- (4) *Food waste is one of the most difficult components in the waste stream to manage because it has a high moisture content, sticks to dry recyclables, thereby reducing their potential value, and attracts pests and becomes malodorous.*
- (5) *The Philadelphia Streets Department collects more than 500,000 tons of residential waste each year, which it delivers to disposal facilities at a cost of about \$29,500,000 per year.*
- (6) *Food waste makes up about 10% of Philadelphia's residential waste.*
- (7) *Analysis of the evidence demonstrates that Food Waste Grinders are valid tools for separating kitchen food waste at its source and diverting it to treatment, use and recycling via existing infrastructure.*
- (8) *Food Waste Grinders offer the best opportunity for cost savings in comparison to other alternatives.*

*P-106.2.2 Domestic food waste grinders. A domestic food waste (garbage) grinder conforming to the American Society of Sanitary Engineering (ASSE) Standard 1008, "Performance Requirements for Household Food Waste Disposer Units," shall be installed in all dwelling unit kitchen areas of newly constructed buildings containing the following occupancies:*

- 1. one-family dwellings*
- 2. two-family dwellings*
- 3. multi-family dwellings*

*Exception: Buildings connected to an individual subsurface sewage disposal system.*

*P-106.2.3 Water supply required. Food waste grinders shall be provided with an adequate supply of water at a sufficient flow rate to ensure proper functioning of the unit.*

*P-102.2.4 Implementation date. The requirement under Section P-106.2.2 shall only apply to structures for which applications for building permits are submitted to the City on or after January 1, 2016.*

SECTION 2. The provisions of this Ordinance shall take effect 35 days after enactment.

# City of Philadelphia

BILL NO. 150651 continued

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**Explanation:**

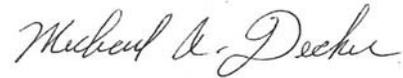
[Brackets] indicate matter deleted.  
*Italics* indicate matter added.

# City of Philadelphia

BILL NO. 150651 continued

Certified Copy

CERTIFICATION: This is a true and correct copy of the original Bill, Passed by the City Council on December 3, 2015. The Bill was Signed by the Mayor on December 23, 2015.



Michael A. Decker  
Chief Clerk of the City Council

**EXECUTIVE ORDER NO. 13 - 93**

**RECYCLED PRODUCT PROCUREMENT POLICY**

**WHEREAS,** The City of Philadelphia landfills or incinerates approximately 800,000 tons of municipal waste each year; and

**WHEREAS,** The City of Philadelphia's participation in and promotion of recycling programs will significantly reduce the amount of solid waste landfilled or incinerated by removing recyclable materials from the waste stream and making them available for reuse by industry; and

**WHEREAS,** For recycling programs to market the growing quantities of recyclable materials, industrial demand to use recycled materials in manufacturing processes must increase and consumer demand to purchase industry's finished products made from recycled materials must increase; and

**WHEREAS,** The City, as a consumer, purchases approximately \$850,000,000 worth of goods and services each year, and the City desires to purchase finished products made from recycled materials, designed for recyclability or emphasizing waste reduction, wherever feasible; and

**WHEREAS**, Section 10-717 of The Philadelphia Code establishes as a goal that the City recycle a minimum of 50% of its total solid waste stream; and Chapter 17-600 of The Philadelphia Code requires the Procurement Department to review and revise all product procurement specifications in order to establish a preference for those containing recycled materials wherever feasible, provides a 10% price preference for paper and paper products containing recycled materials, and requires the Procurement Department to submit an annual report to the Council and the Mayor on its activities in increasing the purchase of products containing recycled materials; and

**WHEREAS**, The Municipal Waste Planning, Recycling and Waste Reduction Act (53 P.S. §4001.101 et seq.) declares as a goal that at least 25% of all municipal waste and source-separated recyclable materials generated in the Commonwealth should be recycled; and

**WHEREAS**, Section 6002 of the Resource Conservation and Recovery Act (RCRA), as amended (42 U.S.C. §6962) requires that municipalities using Federal funds for procurement buy recycled products in certain circumstances, and the U.S. Environmental Protection Agency (EPA) has prepared Guidelines on five specific materials for use by municipalities in meeting the requirements of law; now, therefore,

I, Edward G. Rendell, by the power vested in me as Mayor of the City of Philadelphia, do hereby order as follows:

**Section 1. Purchase of Recycled, Reusable and Recyclable Products**

(a) The City shall have as a goal the maximum feasible purchase of recycled content products (with the maximum feasible percentage of post-consumer recycled content), and reusable or recyclable products, consistent with applicable law and the terms of this executive order.

(b) Prior to initiating a request to the Procurement Department ("Department") for any product or service, a City office, department, board or commission and any other entity for whom purchases are made by the Department ("City agency" or "agency") shall review its existing specifications for such product or service to determine whether recycled content products or reusable or recyclable products are directly or indirectly excluded. The agency must eliminate any such exclusion from its specifications, unless it can demonstrate in writing to the Department's satisfaction, after the Department's consultation with the Streets Department, that the exclusion is either: (i) operationally necessary; (ii) legally mandated; or (iii) necessary to avoid excessive cost.

**(c)** The City shall, as a condition of providing funds under contract to any other public or quasi-public entity, require such entity to adopt a procurement policy substantially similar to that set forth in subsection 1(b).

**(d)** All City professional service contracts shall include a requirement that the provider shall in the purchase of any goods or services required to perform services under the contract, adopt a policy substantially similar to that set forth in subsection 1(b).

## **Section 2. Reporting**

**(a)** Each City agency shall annually submit to the Streets Department a Progress Report identifying: (i) agency actions taken during the prior year to increase the purchase of recycled, reusable and recyclable products; (ii) quantity of each such product purchased and/or weight of each such product purchased; (iii) dollar amounts spent on each of these products; (iv) exclusions of recycled, reusable or recyclable products requested pursuant to subsection 1(b), and status of such requests; and (v) plans and time schedule to meet the goal of maximizing the purchase of recycled content products, reusable or recyclable products.

**(b)** Pursuant to Section 17-604 of The Philadelphia Code, the Department, after consultation with the Streets Department, shall submit an Annual Report to Council and the Mayor summarizing: (i) the total quantity and/or weight of items and where practicable the percentage of reusable, recyclable or recycled content products purchased; (ii) the total estimated dollar amounts to be spent and where practicable the percent of dollars to be spent on products that are reusable, recyclable or recycled content; and (iii) the problems, plans and time schedules for future use of these products.

### **Section 3. Cooperation**

**(a)** The City will cooperate to the greatest extent feasible with neighboring municipal, county and state governments in an effort to develop consistent, comprehensive, regional procurement policies intended to stimulate the market for recycled content products, reusable or recyclable products.

**(b)** All City agencies shall work cooperatively to further the purposes of this executive order. Agencies charged with the City's commerce and economic development process shall incorporate the goals of: (i) attracting industries that use recycled materials, and that manufacture recycled content products, reusable or recyclable products; and (ii) assisting existing manufacturing companies that seek to purchase equipment, convert equipment or expand their physical site to use or increase their use of recycled materials.

**Section 4. Training**

Within four months of the effective date of this executive order, the Streets Department, in conjunction with the Interagency Task Force and the Department, shall hold at least one educational meeting on buying recycled products. Each agency head shall appoint an authorized representative to attend this educational meeting and shall submit in writing this representative's name to the Streets Department in advance of the meeting. Future educational meetings may be held by the Streets Department to provide new information to the agencies and to track interim progress.

**Section 5. Effective Date**

This executive order shall take effect immediately.

October 1, 1993  
DATE

Edward G Rendell  
EDWARD G. RENDELL, MAYOR

Executive Order No. 5-96

**RECYCLING POLICY FOR  
MUNICIPAL BUILDINGS AND EMPLOYEES**

**WHEREAS**, City buildings and facilities generate an estimated 10,000 tons of municipal solid waste each year; and

**WHEREAS**, It is estimated that as much as 70% of the municipal building waste stream is recyclable office paper, cardboard and other paper fiber sources. Source separation recycling of office paper, cardboard and other materials generated in large quantities in the work environment is less costly than disposing of the same material in landfills or incinerators, thereby reducing overall costs and saving money; and

**WHEREAS**, The City has promulgated commercial, institutional and governmental recycling regulations in response to Pennsylvania Act 101, which requires the recovery of office paper, cardboard, aluminum cans and yard waste in all commercial, institutional and government buildings; and

**WHEREAS**, Recycling in City offices is an opportunity for the City to lead business and institutional sectors by example;

**NOW, THEREFORE, BY THE POWER VESTED IN ME BY THE PHILADELPHIA HOME RULE CHARTER, IT IS HEREBY ORDERED AS FOLLOWS:**

1. Each City office, department, board and commission ("City agency") shall appoint one or more Recycling Coordinator(s) to facilitate development of recycling initiatives, and shall submit in writing to the Streets Department Recycling Unit ("Recycling Unit") the name(s) of its Recycling Coordinator(s).
2. The Department of Public Property shall name one or more Recycling Program Manager(s) for each City-owned building and for each City-leased building occupied by 50 or more City employees. Recycling Program Managers in City-owned buildings shall be responsible for the development and oversight of building recycling programs. Recycling Program Managers in City-leased buildings shall act as liaisons with the building's property management staff in coordinating recycling programs as they affect City tenants. The Department of Public Property shall submit in writing to the Recycling Unit a list of the names of all Recycling Program Manager(s).

3. The Recycling Unit shall provide training sessions on the proper planning, design, implementation and monitoring of comprehensive source separation recycling programs. All Recycling Program Managers and Recycling Coordinators shall attend at least one such training session.
4. Recycling Program Managers shall file a Building Solid Waste and Recycling Plan ("Recycling Plan") with the Recycling Unit, on forms provided by the Recycling Unit. Such Plans must comply with the Department of Streets Regulations for Private Collection of Recyclables and Non-Recycled Materials.
5. Upon approval of a Recycling Plan for a building by the Recycling Unit, notice of its requirements shall be distributed to all occupants of the building, and all occupants shall comply with the Recycling Plan. A copy of the Recycling Plan shall be posted in a prominent place in the building, and all visitors shall comply.
6. The Recycling Unit shall work with the Department of Public Property and the Law Department to draft contract language to be included in all City leases in which the City is lessee, which requires the lessor to comply in full with the Streets Department Regulations for Private Collection of Recyclables and Non-Recycled Materials and to provide evidence of compliance as required by the Streets Department.
7. Each City agency, through the normal procurement process, shall procure recycling containers and other items needed to comply with a Recycling Plan. The Recycling Unit shall provide technical assistance as needed to draft bid specifications for all such purchases.
8. A method to account for the economic and environmental benefits of recycling by City agencies shall be established by the Inter-agency Task Force for Recycling and the Finance Director's Office, with technical support from the Recycling Unit. At a minimum, such accounting method shall permit the calculation for each City agency of the savings generated by diverting recycled material from building waste systems; the number of trees saved; the amount of energy conserved; and the extent to which pollution emissions are reduced.
9. By December 1 of each year, the Recycling Unit, in conjunction with the Inter-agency Task Force for Recycling, shall file a fiscal year report with the Mayor, Managing Director, and the Chief Clerk of City Council. The report shall detail, for all buildings covered by this order, the amount of trash disposed of and the amount of recyclables collected, and shall estimate the economic and environmental impact of recycling pursuant to this order.

10. This order shall take effect immediately, except that compliance with the provisions of the following paragraphs shall not be required until the date indicated:

<u>Paragraph</u>	<u>Date when compliance required</u>
1 and 2	Four months after Effective Date
3	Six months after Effective Date
4	Eight months after Effective Date
8	One year after Effective Date
9	First report due December 1, 1997

October 16, 1996  
Date

Edward G. Rendell  
Edward G. Rendell,  
Mayor

**EXECUTIVE ORDER NO. 5-08**

**SOLID WASTE & RECYCLING ADVISORY COMMITTEE**

**WHEREAS**, the Commonwealth's Municipal Waste Planning, Recycling and Waste Reduction Act calls for the creation of an advisory body to provide comment in connection with the City's waste management plans prepared and submitted to the Commonwealth under that Act; and

**WHEREAS**, the City's Solid Waste Advisory Committee has operated at various times in the past; and

**WHEREAS**, a Recycling Advisory Committee has operated at various times in the past; and

**WHEREAS**, the City affirms the success of current citywide single stream recycling program and desires to implement an integrated solid waste management philosophy by reducing the production of solid waste and establishing the goal of an 18 percent residential recycling diversion rate by 2011; and

**WHEREAS**, the City affirms the success of its commercial recycling program and desires to implement an integrated solid waste management philosophy by reducing the production of solid waste and establishing the goal of an 65 percent commercial recycling diversion rate by 2011; and

**WHEREAS**, the City affirms its commitment to achieve a combined residential and commercial recycling diversion rate of 50 percent by 2011; and

**WHEREAS**, integrated solid waste management will improve the quality of life for citizens, businesses and visitors, supports a sustainable environment and positively affects the City's budget; and

**WHEREAS**, the City values the active participation of residents, advocates and businesses in the ongoing development of solid waste and recycling plans and programs; and

**WHEREAS**, in order to assist in the fulfillment of those goals, it is important to reconstitute an advisory body to provide the Administration with expertise and counsel in the areas of solid waste management and recycling practices;

**NOW, THEREFORE**, by the powers vested in me by the Philadelphia Home Rule Charter, it is hereby **ORDERED**:

## **Section 1. ESTABLISHMENT OF THE SOLID WASTE & RECYCLING ADVISORY COMMITTEE**

The Philadelphia Solid Waste & Recycling Advisory Committee (“SWRAC”) is hereby established in the Department of Streets.

## **Section 2. DUTIES OF THE SWRAC**

The SWRAC shall advise the Department of Streets regarding:

- (a) the City’s preparation and implementation of its waste management plans prepared and submitted to the Commonwealth pursuant to the Municipal Waste Planning, Recycling and Waste Reduction Act;
- (b) the development and implementation of a Recycling Work Plan; and
- (c) other policy, regulations and programs as requested by the Street Commissioner.

## **Section 3. COMPOSITION OF THE SWRAC**

The SWRAC shall be comprised of up to 13 members appointed by the Mayor as follows:

- A representative of a municipal solid waste company operating within Philadelphia;
- A representative of a recycling company operating within Philadelphia;
- Two representatives of advocacy organizations with active recycling advocacy programs;
- A representative of the collective bargaining unit that represents those workers whose primary duty is the collection of municipal solid waste and recycling materials;
- An attorney with experience in environmental law;
- A representative of the School District of Philadelphia;
- A representative of the Philadelphia Housing Authority;
- The City’s Recycling Coordinator; and

- Up to four other representatives of other community organizations and businesses that have an interest in solid waste management and recycling activities.

The Mayor shall appoint a Chairperson from the membership of the Committee.

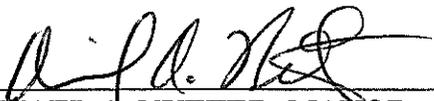
**Section 4. PRIOR ADVISORY BODIES**

The previously constituted Solid Waste Advisory and Recycling Advisory Committees are hereby disestablished.

**Section 5. EFFECTIVE DATE**

This Order shall be effective immediately.

12/17/08  
DATE

  
MICHAEL A. NUTTER, MAYOR

# City of Philadelphia



Council of the City of Philadelphia  
Office of the Chief Clerk  
Room 402, City Hall  
Philadelphia

(Resolution No. 140626)

## RESOLUTION

Authorizing the Joint Committees of Streets and Services and the Environment to hold hearings on the feasibility of and benefits to the City of residential food waste recycling including its impact on environmental quality, hunger prevention, economic savings and job creation.

WHEREAS, "Food accounts for about 13 percent of the nation's trash, the third-largest component after paper and yard trimmings. Based on that average and the \$65 per-ton rate to haul away trash in Philadelphia, it costs the City approximately \$6.1 million a year to move uneaten food from plate to landfill," according to the Mayor's Office of Sustainability's Greenworks Philadelphia 2009 report; and

WHEREAS, Decomposing food buried in landfills releases methane, a potent, dangerous greenhouse gas and incineration— a common alternative to burying waste in landfills creates environmental and health hazards through the release of toxins into our air supply; and

WHEREAS, Because incinerators are inefficient at generating electricity from burning waste, and recycling and composting conserve three to five times more energy than is produced by incinerating waste, the amount of energy wasted in the U.S. by not recycling is equal to the output of 15 medium-sized power plants; and

WHEREAS, According to the Environmental Protection Agency, Americans threw away more than 36 million tons of food in 2012, which the Natural Resources Defense Council estimated is about \$165 billion worth of food annually. Even 15% of the food being discarded would be enough to feed 25 million people at a time when one in six Americans does not always have enough to eat; and

WHEREAS, Composting, often described as nature's way of recycling, is the biological process of breaking up of organic waste such as food waste, leaves, grass trimmings, paper, and coffee grounds, etc., into an extremely useful humus-like substance by various

# City of Philadelphia

*RESOLUTION NO. 140626 continued*

micro-organisms including bacteria, fungi and actinomycetes in the presence of oxygen. Today, the use of composting to turn organic wastes into a valuable resource is expanding rapidly in many countries, as landfill space becomes scarce and expensive, and as people become more aware of the impact they have on the environment; and

WHEREAS, In Philadelphia there are already private companies and local institutions that are realizing that composting food waste is a viable economic and job creation venture. The Environmental Protection Agency has identified 25 businesses, institutions and schools in Philadelphia and its suburbs participating in the national Food Recovery Challenge; and

WHEREAS, The number of communities in the U.S. with residential food waste collection service has grown by more than 50 percent since 2009. Austin, Texas sold \$267,000 of yard compost in one year as a result of its residential food waste recycling collection service. New York City has recently launched a pilot program to collect food waste for over 70,000 households, hoping to divert the roughly 3.2 tons of waste that New Yorkers send to landfills every year at a cost of \$300 million and divert a large part to compost. A national municipal model is San Francisco, where homes have three bins: green for compostables, blue for recyclables, black for the rest. The city aims to be zero-waste by 2020; and

WHEREAS, While the City of Philadelphia has taken some steps towards encouraging food waste recycling in public locations, there is much more that can and should be done to live up to the City's goal of becoming the greenest city in the nation; now, therefore, be it

RESOLVED, BY THE COUNCIL OF THE CITY OF PHILADELPHIA, That it hereby authorizes the Joint Committees of Streets and Services and the Environment to hold hearings on the feasibility of and benefits to the City of residential food waste recycling including its impact on, environmental quality, hunger prevention economic savings and job creation.

# City of Philadelphia

*RESOLUTION NO. 140626 continued*

# City of Philadelphia

*RESOLUTION NO. 140626 continued*

CERTIFICATION: This is a true and correct copy of the original Resolution, Adopted by the Council of the City of Philadelphia on the nineteenth day of June, 2014.

Darrell L. Clarke  
PRESIDENT OF THE COUNCIL

Michael A. Decker  
CHIEF CLERK OF THE COUNCIL

Introduced by: Councilmembers Bass and O'Brien

Sponsored by: Councilmembers Bass, O'Brien, Reynolds Brown and Squilla

**EXECUTIVE ORDER NO. 13-16**  
**ZERO WASTE AND LITTER CABINET**

**WHEREAS**, waste and litter negatively impact the quality of life for Philadelphia residents and the impression of the City provided to visitors, create millions of dollars in costs for clean-up and proper disposal, contaminate soil and water, pose a fire hazard, promote disease transmission, and harm pets and wildlife; and

**WHEREAS**, waste and litter are a blight on the beauty and cleanliness of City rights of way, waterways, and other public spaces; and

**WHEREAS**, Philadelphia taxpayers spend tens of millions of dollars annually to clean up and dispose of municipal waste – a cost that could be significantly reduced by the right strategies to reduce the volume of material in the City’s waste stream; and

**WHEREAS**, if Philadelphia is to achieve its goal of becoming a “Zero Waste” city, it must continue to find innovative strategies to decrease the amount of waste generated and disposed of through conventional means; and

**WHEREAS**, Philadelphia should strive to become the cleanest city in America – a goal that can only be accomplished by individuals, government agencies, private businesses, community organizations, and other stakeholders working together to change behavior and maintain public spaces free of waste and litter;

**NOW, THEREFORE**, I, JAMES F. KENNEY, Mayor of the City of Philadelphia, by the powers vested in me by the Philadelphia Home Rule Charter, do hereby order as follows:

**SECTION 1. Creation of Zero Waste and Litter Cabinet**

There is hereby created within the Managing Director’s Office a Zero Waste and Litter Cabinet.

**SECTION 2. Purpose of the Cabinet**

The Cabinet shall create and recommend to the Managing Director implementation of an action plan for waste reduction and litter prevention, containing at least the following elements:

(A) A data-driven, comprehensive, and coordinated action plan for reducing the amount of material in the waste stream and preventing and managing litter in the right of way and other public spaces;

(B) Education, through outreach and partnerships with public and private stakeholder organizations, on preventing and managing litter in order to better engage these stakeholders in devising solutions and taking meaningful action toward a Zero Waste goal;

(C) Development of strategic partnerships with government agencies, private businesses, community organizations, and other stakeholders to assist the Managing Director's Office in implementing the action plan;

(D) Establishment of measurable standards to demonstrate progress toward the goals of a greener and cleaner city.

### **SECTION 3. Membership**

The Cabinet shall be comprised of at least 16 members selected for their commitment to the health, safety, and environment of Philadelphia and their capacity to recognize the objectives of the Cabinet. The membership of the Cabinet shall be as follows:

(A) The Managing Director and the Deputy Managing Director for Transportation and Infrastructure, or his or her designees, who shall serve as the co-chairs of the Cabinet.

(B) Each of the following individuals or their designees: Director of Commerce and Director of Planning and Development.

(C) The President of City Council or the President's designee.

(D) One representative from each of the following, to be designated by the entity: the School District of Philadelphia, the Office of the District Attorney, the Southeastern Pennsylvania Transportation Authority, and the Pennsylvania Department of Transportation.

(E) Seven people, appointed by the Managing Director, from Philadelphia's community organizations, businesses, and non-profit corporations.

### **SECTION 4. Cooperation**

(A) Subject to the approval of the Managing Director, the following agencies shall designate personnel to advise and assist the Cabinet and the Managing Director's Office in the development and implementation of the objectives of the Cabinet and the Action Plan required under Section 5: Philadelphia More Beautiful Committee, Community Life Improvement Program, 311, Streets Department, Water Department, Office of Sustainability, Department of Public Health, Department of Public Property, Police Department, Department of Licenses and Inspections, Department of Parks and Recreation.

(B) All City Departments, Agencies, Boards, and Commissions shall cooperate with the Cabinet and shall provide any data it may require with respect to the operations of City government.

(C) Other public entities, as well as those in the private sector, are encouraged to support and cooperate with the Cabinet.

**SECTION 5. Action Plan**

Within 180 days from the date of this Executive Order, the Cabinet shall establish an action plan and make it available to the public.

**SECTION 6. Progress Report**

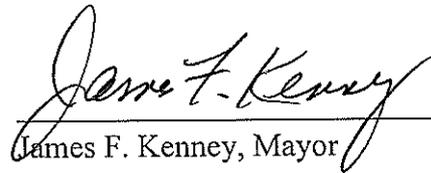
The Cabinet shall prepare an annual report on its action plan, strategic partnerships, activities, and progress, due no later than September 30 each year beginning in September 2017. The report shall be delivered to the Mayor, the President of City Council, the Managing Director, and the Chief Clerk of Council and posted on the City's website for public viewing.

**SECTION 7. Effective Date.**

This Order shall take effect immediately.

Date

12/20/16

  
James F. Kenney, Mayor

City of Philadelphia  
Law Department

## Memorandum

**TO:** Michael DiBerardinis, Managing Director  
**FROM:** Martha Johnston, Senior Attorney/MJ  
**DATE:** December 15, 2016  
**SUBJECT:** Proposed Executive Order Re: Zero Waste and Litter Cabinet

---

You have submitted for review a draft of a proposed Executive Order entitled:

### **ZERO WASTE AND LITTER CABINET**

This proposed Executive Order, a copy of which is attached hereto, is in proper form and there is no legal objection to its issuance by the Mayor. In accordance with customary practice, we have not been requested to review any factual premises upon which this Executive Order may be based.

**Appendix G**

**SWRAC Meeting Minutes and Subcommittees Meeting Notes**

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** November 14, 2013

**ATTENDEES:**

SWRAC Members

Bob Anderson, ReCommunity Recycling  
Phil Bresee, Streets Department/Recycling Office  
Andrew Dalzell, South of South Neighborhood Association  
Jack Embick, Environmental Law  
Michele Feldman, Keep Philadelphia Beautiful  
Katherine Gajewski, Mayor's Office of Sustainability  
Dan Garafolo, University of Pennsylvania  
Fern Gookin, Revolution Recovery  
Sal Iadonisi, United States Recycling, Inc.  
Paul Kohl, Philadelphia Water Department  
Joe Minott, Clean Air Council  
Vivian Van Story  
Charles Raudenbush, Waste Management  
Maurice Sampson, Niche Recycling  
Andrew Sharp, PennFuture  
Debbie Zimmer, Dow Chemical

City Staff

Donald Carlton, Deputy Streets Commissioner  
Scott McGrath, Director of Environmental Services, Streets Dept.  
Susan McTamney, Streets Department/Recycling Office (Recording)

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The meeting was called to order at approximately 3:05 p.m.

Participants were welcomed by City staff, including Streets Deputy Commissioner Donald Carlton, Recycling Director Phil Bresee, and Environmental Services Director Scott McGrath. SWRAC member introductions then ensued.

Staff indicated that Ms. McTamney will perform recording secretary duties for SWRAC meetings, and that correspondence will flow through her as well.

Staff (Bresee, McGrath) provided SWRAC with a PowerPoint presentation that detailed the status of solid waste and recycling in Philadelphia, current recycling and solid waste programs, future recycling capacity, and Act 101 plan updates. Some changes from 2000 plan will include integration with Greenworks Plan, UnLitter Us, bio-solids management, 2012 disposal contracts, single-stream recycling, etc. A proposed timeline for development of the updated solid waste management plan was included as part of the presentation (see attached).

The matter of SWRAC chair has yet to be discussed. Staff indicated that the appointment is made by the mayor. Until a chair is appointed, staff will conduct the meetings.

Other discussions and comments included:

- Commercial recycling: There are still huge gaps in the potential recycling in this city. Such as condominiums, office buildings are struggling more so we have to help more. The Recycling Office staff is developing a revised business recycling toolkit, which will be downloadable. Business recycling web pages are also getting an update. Staff also indicated the need to revise the City's recycling ordinance.
- MSW and recycling data management: There were questions and comments on the accuracy and transparency of the City's recycling rate calculations. Staff indicated the statistics as shown in the presentation are "all-in" and include residential, commercial and C&D, similar to the way other jurisdictions count tonnages.
- The new solid waste management plan span the term of the three mayors. SWRAC should use this as an opportunity to consider the future and review options. There was discussion on whether disposal pricing would increase or decrease post current contracts (FY 2019 expiration).
- Waste Management's Spec FUEL© plant will be operational in about a month.
- The Philadelphia Water Department will be opening a cogeneration plant on November 22<sup>nd</sup>.
- There were brief discussions on the status of the InSinkErator food waste disposer project.
- Staff indicated that SWRAC may wish to establish subcommittees to focus on certain elements of MSW management, e.g. commercial recycling.

Meeting was convened at approximately 4:30 p.m. The next meeting will be held December 12, 2013 at 3 p.m. The meeting room number will be provided as part of meeting announcements and minutes to be distributed about a week prior to the meeting.

Submitted,

Susan McTamney (Recording)



**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** February 20, 2014

**ATTENDEES:**

SWRAC Members Present

Bob Anderson, ReCommunity Recycling  
Phil Bresee, Streets Department/Recycling Office  
Andrew Dalzell, South of South Neighborhood Association  
Jack Embick, Environmental Law  
Katherine Gajewski, Mayor's Office of Sustainability  
Sal Iadonisi, United States Recycling, Inc.  
Paul Kohl, Philadelphia Water Department  
Joe Minott, Clean Air Council  
Vivian Van Story, Community Land Trust Corporation  
Charles Raudenbush, Waste Management  
Maurice Sampson, Niche Recycling  
Jeff Cardwell, School District of Philadelphia

SWRAC Members Not Present

Andrew Sharp, PennFuture  
Debbie Zimmer, Dow Chemical  
Fern Gookin, Revolution Recovery  
Michele Feldman, Keep Philadelphia Beautiful  
Dan Garafolo, University of Pennsylvania

City Staff

Scott McGrath, Director of Environmental Services, Streets Dept.  
Ian Hegarty, Recycling Planner, Streets Dept.  
Conisha Davis, Streets Department/Recycling Office (Recording)

Other Attendees

Jim Osborn, Alternative Resources, Inc.  
Samantha Wittchen, iSpring Sustainability Consulting  
Danielle Masi, LevLane Media  
Jason Rossano, LevLane Media

**Call to order/introductions:**

The meeting was called to order at approximately 3:05 p.m.

**Minutes:**

The minutes from the November 14<sup>th</sup> meeting were approved unanimously.

**Old business:**

There was no old business to discuss

**New business (Discussion/Action Items):**

- Staff (Bresee, McGrath) introduced Jim Osborn, principal of Alternative Resources, Inc. (ARI), who will be serving as the City's consultant for the solid waste plan rewrite.
- Staff updated SWRAC on solid waste plan rewrite activities to-date, which include drafts of the plan's introductory chapter, and chapter 1.
- Jeff Cardwell of PSD reported that new solid waste and recycling services contract was in place, with recycling set to resume in May (need to confirm). Mr. Cardwell thanked Streets Department staff for assistance during their RFP and negotiations process.
- Vivian Van Storey raised a number of issues for discussion:
  - Mattress collection issue (reported mattress piles)
  - Missed garbage and recycling pickups and communications
  - Inadequacy of 311 system
  - Philadelphia Housing Authority collection concerns
- Staff provided update on on-going efforts to improve recycling in city agencies and buildings. Efforts to-date include:
  - Multiple meetings with Department of Public Property, building managers and floor liaisons.
  - Purchase and distribution of new office and workstation recycling bins.
  - Review of status of recycling among City agencies in leased commercial office space.
  - Recycling bin distribution at Fire stations.
- Jason Rossano and Danielle Masi of LevLane Media gave a presentation on the city's anti-litter and recycling outreach from 2006 until 2013. SWRAC questions and comments included:
  - Plastics recycling issues (labeling)
  - Plastic bags and operational impacts at MRFs
  - Messaging, e.g. focus on quality control or broad-based encouragement of recycling. Recycling processors stressed need to go back to "recycle right" messaging.
- Samantha Wittchen of iSpring Sustainability Consulting provided an overview of the Streets Department's business recycling toolkit project.
  - There was discussion on draft toolkit's assertions that businesses can improve their bottom line by implementing recycling. Staff held position that businesses can do so if they're able to right-size garbage service levels when recycling is implemented. Staff agreed to soften language.
  - There was a suggestion that toolkit be presented to haulers before it is released.

- SWRAC subcommittees discussion was deferred until next meeting.

**Announcements:**

There were no announcements.

**Adjourn:**

Meeting was adjourned at approximately 5 p.m. The next meeting will be held March 20<sup>th</sup> at 3 p.m. The meeting room number will be provided as part of meeting announcements and minutes to be distributed about a week prior to the meeting.

Submitted,

Conisha Davis (Recording)

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** March 20, 2014

**ATTENDEES:**

SWRAC Members Present

Bob Anderson, ReCommunity Recycling  
Phil Bresee, Streets Department/Recycling Office  
Andrew Dalzell, South of South Neighborhood Association  
Jack Embick, Environmental Law  
Fern Gookin, Revolution Recovery  
Sal Iadonisi, United States Recycling, Inc.  
Paul Kohl, Philadelphia Water Department  
Vivian Van Story, Community Land Trust Corporation  
Charles Raudenbush, Waste Management  
Maurice Sampson, Niche Recycling  
Michele Feldman, Keep Philadelphia Beautiful

SWRAC Members Not-Present

Andrew Sharp, PennFuture  
Katherine Gajewski, Mayor's Office of Sustainability  
Jeff Cardwell, School District of Philadelphia  
Joe Minott, Clean Air Council  
Debbie Zimmer, Dow Chemical  
Dan Garafolo, University of Pennsylvania

Other Attendees

Ben Ditzler, RecycleNow  
Alisa Shargorodsky, Niche Recycling

City Staff

Donald Carlton, Streets Deputy Commissioner for Sanitation  
Scott McGrath, Director of Environmental Services, Streets Dept.  
Ian Hegarty, Recycling Planner, Streets Dept.  
Kyle Lewis, Office of the City Representative  
Conisha Davis, Streets Department/Recycling Office (Recording)

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**Call to order/introductions:**

The meeting was called to order at approximately 3:10 p.m.

### **Approval of Minutes:**

The minutes from the February 20<sup>th</sup> meeting were approved unanimously.

### **New Business (taken out of order in order to accommodate presenters):**

- Scott McGrath, Streets Department Environmental Services Director, gave a PowerPoint overview (presentation will be included in SWRAC Drop-box folder) of the upcoming Philly Spring Cleanup event (April 12, 2014). Deputy Commissioner Carlton also spoke about the project's history and outcomes. Last year's event featured 13,000 volunteers and it collected more than 1 million tons of trash and litter from about 560 sites.
- Jim Osborn of Alternative Resources, Inc. provided a status update and overview of the Solid Waste Management Plan rewrite process. Mr. Osborn provided copies of current drafts for sections 1 and 2 and discussed requirements laid out in Commonwealth Statute. Discussions ensued on the data shown in the draft plan sections:
  - MSW composition data comparison between U.S. EPA and Streets Department's 2010 residential study (performed by MSW Consultants).
  - There were discussions related to methodology for calculating MSW composition data (EPA vs. city's), as well as updates to be made by the Department.
  - Maurice Sampson and Ben Ditzler raised questions regarding the findings from the 2010 MSW Consultants study, specifically over the opportunity for recycling analysis as detailed in the study, and the high incidence of C&D materials.
  - Mr. Bresee pointed out that a considerable amount of data was shared through a presentation at the November SWRAC meeting.
  - Maurice Sampson suggested and asked for a show of hands relating to establishment of a subcommittee to focus solely on the data and statistics.
- Kyle Lewis, Director of Operations for the Office of the City Representative gave presentation on solid waste management at the 2012 and 2013 Philadelphia Marathons (presentation will be made available through SWRAC's drop-box folder). Eighty-six percent of the 29.3 tons of waste generated at the event was recycled or diverted (74% single-stream recyclables, 12.5% organics; 14% disposed). The event was awarded a 'Gold' designation by the Council for Responsible Sport, a sustainable sporting event certification body. Bresee added the Philadelphia Marathon results place it among the most successful events in the country.

### **Old business:**

- SWRAC subcommittees were discussed with Michelle Feldman indicating interest in heading up a commercial recycling subcommittee. Andrew Dalzell expressed interest in establishing a subcommittee to review public participation and asked for other volunteers. Mr. Dalzell also

requested information from Jim Osborn on the state's requirements for public participation in the solid waste management plan development process.

- Maurice Sampson inquired on the status of the SWRAC chair appointment. He suggested and asked for a show of hands regarding scheduling a meeting the mayor to share their concerns regarding the delays in appointing a chair. Staff indicated they hoped to have the issue resolved by the next SWRAC meeting.

**Announcements:**

Upcoming events include:

- "Red goes Green" Earth Day event at Phillies/Braves game, April 17<sup>th</sup>.
- Frankford Litter Reduction Workshop, April 19<sup>th</sup>
- Urban Tree Connection Event, April 22<sup>nd</sup>.

Meeting was adjourned at approximately 5 p.m. The next meeting will be held April 17<sup>th</sup>, at 3 p.m. The meeting room number will be provided as part of meeting announcements and minutes to be distributed about a week prior to the meeting.

Submitted,

Conisha Davis (Recording)

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** April 17, 2014

**ATTENDEES:**

SWRAC Members Present

Bob Anderson, ReCommunity Recycling  
Andrew Dalzell, South of South Neighborhood Association  
Jack Embick, Environmental Law  
Sal Iadonisi, United States Recycling, Inc.  
Joe Minott, Clean Air Council  
Vivian Van Story, Community Land Trust Corporation  
Charles Raudenbush, Waste Management  
Katherine Gajewski, Mayor's Office of Sustainability  
Michele Feldman, Keep Philadelphia Beautiful  
Fern Gookin, Revolution Recovery  
Phil Bresee, Streets Department/Recycling Office

SWRAC Members Absent

Andrew Sharp, PennFuture  
Debbie Zimmer, Dow Chemical  
Dan Garafolo, University of Pennsylvania  
Jeffrey D. Cardwell, School District of Philadelphia  
Maurice M. Sampson II, Niche Recycling  
Paul Kohl, Philadelphia Water Department

Others Present

Joe Connors, EForce Compliance  
Gordon Sabol, Waste Management

City Staff

Scott McGrath, Director of Environmental Services, Streets Dept.  
Sam Robinson, Law Department  
Ian Hegarty, Recycling Planner, Streets Dept.  
Conisha Davis, Streets Department/Recycling Office (Recording)

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**Call to order/introductions:**

The meeting was called to order at approximately 3:10 p.m.

**Minutes:**

The minutes from the March 20<sup>th</sup> meeting were approved unanimously.

### Old business:

- It was announced that members Michelle Feldman and Andrew Sharp have agreed to serve as SWRAC co-chairs. They will assume co-chair duties effective the May meeting.
- Scott McGrath, Streets Department Environmental Services Director, provided results from the Philly Spring Cleanup (April 12, 2014). This year PSC featured 14,225 volunteers, 569 official projects, collected 1,122,880 lbs. of material, including 971,000 lbs of trash, 29,940 lbs. of recyclables, 126,000 lbs. tires, and 3,200 recycling bins were distributed. The day featured a kick-off event at the Gideon School in North Philadelphia, with remarks by Mayor Nutter, Keep America Beautiful President & CEO Jennifer Jehn, and Streets Department Commissioner David Perri. Connor Barwin of the Philadelphia Eagles also was present.

### New business:

- Andrew Dalzell of SoSNA issued the report from the public participation subcommittee (minutes attached). The SWRAC discussed the various options and requirements for public input on the solid waste management plan and process. Comments included:
  - The public participation requirements outlined in Act 101 and the administrative rules are minimal.
  - The SWRAC should go beyond the minimum requirements as it relates to public participation.
  - Members and staff discussed ways in which public input could be solicited, including multiple (two to four) city-wide forums.
  - SWRAC and the City need to ensure that the plan is not a finished work prior to seeking input, but also that it is far enough along whereby people can react to its contents in a meaningful way.
  - The Streets Department asked for public feedback on snow-removal operations this winter. Perhaps similar feedback can be sought related to the solid waste management plan.
- Scott McGrath provided a presentation update on the solid waste management plan and process. Key points and discussion included:
  - Chapters 1-4 of the plan will deal primarily with current conditions and MSW management.
  - Chapters 5-7 will evaluate disposal and processing capacity, as well as technological changes.
  - Chapters 8-9 will address programs and integration with the City's Greenworks plan.
  - Chapter 10 to address HHW and biosolids management.
  - Chapter 11 will address public participation; chapter 12 to address implementation.
  - Members agreed that the committee should establish a target completion date and use this to create a timeline for major tasks.
  - Minutes and backup from SWRAC and related meetings will be part of the official plan record.
- Phil Bresee provided a presentation overview of Philadelphia's solid waste management statistical compilation and reporting methodology. Highlights included:
  - Philadelphia's 2012 total (includes residential, commercial, and C&D) MSW generation was 2.7 million tons. Of that 50% was recycled, 27% landfilled and 23% combusted.
  - Recycling rate is highly influenced by 80% recovery of C&D and high recovery of scrap metals.

- City counts MSW and recycling per Commonwealth rules. These are consistent with how other states measure MSW.
- City discussed tonnage data sources and the annual Act 101 reporting process.
- City discussed the 2010 MSW composition study, its methodology and findings.
- City compared MSW generation with other jurisdictions.
- MSW as sampled as part of the InSinkErator project in 2013 had similarities to MSW composition in 2010.
- Scott McGrath provided a presentation update on the BigBelly solar compacting public space trash and recycling container program. Highlights and key points included:
  - 970 units across the city (includes 420 recyclers).
  - Implemented in four phases; ARRA – EECGB grant monies were used as part of phase 3 expansion.
  - Some civics and business districts have purchased their own BigBelly units.
  - Units are being re-wrapped with the “I’m Behind Recycling” campaign theme.

**Announcements:**

- April 17<sup>th</sup> Phillies “Red Goes Green Day” Event
- April 19<sup>th</sup> Frankford Litter Reduction Initiative 2014 Educational Workshop
- April 22<sup>nd</sup> Earth Day cleanup event in West Philadelphia.
- Phil Bresee from the Streets Department and Bob Anderson of ReCommunity will both be speaking on panels at WasteExpo in Atlanta, April 29<sup>th</sup>.

**Adjournment:**

Meeting was adjourned at approximately 5 p.m. The next meeting will be held May 15<sup>th</sup> at 3 p.m. The meeting room number will be provided as part of meeting announcements and minutes to be distributed about a week prior to the meeting.

Submitted,

Conisha Davis (Recording)

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** May 15, 2014

**ATTENDEES:**

SWRAC Members Present

Bob Anderson, ReCommunity Recycling  
Andrew Dalzell, South of South Neighborhood Association  
Jack Embick, Environmental Law  
Joe Minott, Clean Air Council  
Vivian Van Story, Community Land Trust Corporation  
Michelle Feldman, Keep Philadelphia Beautiful  
Andrew Sharp, PennFuture  
Dan Garafolo, University of Pennsylvania  
Debbie Zimmer, Dow Chemical  
Maurice M. Sampson II, Niche Recycling  
Patty Barthel, Waste Management  
Tamika Davis, Airport DOA  
Danielle Bower, Airport DOA  
Michael Roles, Clean Water Action  
Maura Jarvis, Drexel University  
Alisa Shargorodsky, University of Pennsylvania  
Alex Davis, Mayor's Office of Sustainability  
Phil Bresee, Streets Department/Recycling Office

SWRAC Members Absent

Sal Iadonisi, United States Recycling, Inc.  
Charles Raudenbush, Waste Management  
Katherine Gajewski, Mayor's Office of Sustainability  
Fern Gookin, Revolution Recovery  
Dan Garafolo, University of Pennsylvania  
Jeffrey D. Cardwell, School District of Philadelphia  
Maurice M. Sampson II, Niche Recycling  
Paul Kohl, Philadelphia Water Department

City Staff

Scott McGrath, Director of Environmental Services, Streets Dept.  
Ian Hegarty, Recycling Planner, Streets Dept.  
Donald Carlton, Acting Commissioner, Streets Dept.  
Conisha Davis, Streets Department/Recycling Office (Recording)

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**Call to order/introductions:**

The meeting was called to order at approximately 3:15 p.m.

**Minutes:**

The minutes from the April 17<sup>th</sup> meeting were approved unanimously.

**Old business:**

- Michelle Feldman and Andrew Sharp introduced themselves as the new co-chairs to serve SWRAC.
- Scott McGrath, Streets Department Environmental Services Director, talked about getting draft situated for the solid waste plan by Oct. 2014. Phil Bresee provided data for the draft plan updates. Maurice Sampson of Niche Recycling, mentioned data meeting; he asked for caution in reporting numbers that delineation between residential and commercial. Ensure that funding to recycle is not cut-off.

**New business:**

- Alex Dews introduced GreenWorks Philadelphia. Recycling plays a big part in this organization. Greenworks has 5 goals: energy, environment, equity, economy, and engagement.
  - The public participation requirements outlined in Act 101 and the administrative rules are minimal.
  - The SWRAC should go beyond the minimum requirements as it relates to public participation.
  - Members and staff discussed ways in which public input could be solicited, including multiple (two to four) city-wide forums.
  - SWRAC and the City need to ensure that the plan is not a finished work prior to seeking input, but also that it is far enough along whereby people can react to its contents in a meaningful way.
  - The Streets Department asked for public feedback on snow-removal operations this winter. Perhaps similar feedback can be sought related to the solid waste management plan.
- Scott McGrath provided a presentation update on the solid waste management plan and process. Key points and discussion included:
  - Chapters 1-4 of the plan will deal primarily with current conditions and MSW management.
  - Chapters 5-7 will evaluate disposal and processing capacity, as well as technological changes.
  - Chapters 8-9 will address programs and integration with the City's Greenworks plan.
  - Chapter 10 to address HHW and biosolids management.
  - Chapter 11 will address public participation; chapter 12 to address implementation.
  - Members agreed that the committee should establish a target completion date and use this to create a timeline for major tasks.
  - Minutes and backup from SWRAC and related meetings will be part of the official plan record.
- Phil Bresee provided a presentation overview of Philadelphia's solid waste management statistical compilation and reporting methodology. Highlights included:
  - Philadelphia's 2012 total (includes residential, commercial, and C&D) MSW generation was 2.7 million tons. Of that 50% was recycled, 27% landfilled and 23% combusted.

- Recycling rate is highly influenced by 80% recovery of C&D and high recovery of scrap metals.
- City counts MSW and recycling per Commonwealth rules. These are consistent with how other states measure MSW.
- City discussed tonnage data sources and the annual Act 101 reporting process.
- City discussed the 2010 MSW composition study, its methodology and findings.
- City compared MSW generation with other jurisdictions.
- MSW as sampled as part of the InSinkErator project in 2013 had similarities to MSW composition in 2010.
- Scott McGrath provided a presentation update on the BigBelly solar compacting public space trash and recycling container program. Highlights and key points included:
  - 970 units across the city (includes 420 recyclers).
  - Implemented in four phases; ARRA – EECGB grant monies were used as part of phase 3 expansion.
  - Some civics and business districts have purchased their own BigBelly units.
  - Units are being re-wrapped with the “I’m Behind Recycling” campaign theme.

**Announcements:**

- Commercial Recycling Toolkit is finally finished.

**Adjournment:**

Meeting was adjourned at approximately 5 p.m. The next meeting will be held June 19<sup>th</sup> at 1 p.m. The meeting room number will be provided as part of meeting announcements and minutes to be distributed about a week prior to the meeting.

Submitted,

Conisha Davis (Recording)

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** June 19, 2014

**ATTENDEES:**

SWRAC Members Present

Michele Feldman, Keep Philadelphia Beautiful  
Andrew Sharp, PennFuture  
Phil Bresee, Streets Department/Recycling Office  
Jack Embick, Environmental Law  
Dan Garafolo, University of Pennsylvania  
Sal Iadonisi, United States Recycling, Inc.  
Paul Kohl, Philadelphia Water Department  
Charles Raudenbush, Waste Management  
Maurice M. Sampson II, Niche Recycling  
Vivian Van Story, Community Land Trust Corporation

SWRAC Members Absent

Bob Anderson, ReCommunity Recycling  
Jeffrey D. Cardwell, School District of Philadelphia  
Andrew Dalzell, South of South Neighborhood Association  
Katherine Gajewski, Mayor's Office of Sustainability  
Joe Minot, Clean Air Council  
Debbie Zimmer, Dow Chemical

Others Present

Joe Connors, EForce Compliance  
Mike Roles, Clean Water Action  
Jason Rossano, LevLane Media  
Danielle Masi, LevLane Media  
Jim Osborn, ARI  
Sue Higgins, ARI

City Staff

Scott McGrath, Director of Environmental Services, Streets Dept.  
Ian Hegarty, Recycling Planner, Streets Dept.

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**Call to order/introductions:**

SWRAC co-chairs Michelle Feldman and Andrew Sharp called the meeting to order at approximately 1:10 p.m.

**Minutes:**

Approval of the minutes from the May 15<sup>th</sup> SWRAC meeting was deferred until the next business meeting.

**Old business:**

Deferred until next SWRAC business meeting.

**New business:**

Deferred until next SWRAC business meeting.

**SWRAC Program:**

Sue Higgins and Jim Osborn of Alternative Resources, Inc. (the City's consultants) led a facilitated discussion to allow for the SWRAC to identify strategic opportunities and planning objectives. A Powerpoint deck (attached) was provided that detailed meeting agenda, purpose, structure, background, and key issues for discussion. Comments from participants included:

- Phil Bresee suggested that SWRAC's recommendations be formed around following the solid waste management hierarchy as established by EPA. He noted that solid waste management is now being referred to more as "materials management".
- Paul Kohl sought clarification on whether City's solid waste management plan is developed to address only residential solid waste, or is it intended to also address commercial and institutional waste? Phil Bresee confirmed that the entire solid waste stream is to be considered when developing solid waste plans.
- Maurice Sampson stated that the history of Philadelphia's solid waste management, understanding of the scope of waste management processes and systems and awareness of laws and ordinances all need to be affected. Sue Higgins asked whether this was for just the SWRAC or for the public at large. Mr. Sampson said both.
- Mike Roles relayed stakeholder interests in forming better public understandings of streets crews' tasks, challenges, training, etc. Sanitation workers should have better understanding of program rules. Mr. Roles followed that SWEEP's mission should be better explained to the general public too.
- Paul Kohl recommended that anaerobic digestion be decoupled from more traditional composting.
- Maurice Sampson suggested that SWRAC needs to better define the paradigm, i.e., what is waste stream focus? The City needs a better developed organics infrastructure. He suggested that create opportunity and residents will respond.
- Chuck Raudenbush mentioned the success of Recyclebank and suggested that commercial solid waste generators should have incentive programs as well.
- Maurice Sampson also suggested that collection systems become more efficient and that we should not avoid "third rail" issues, i.e. the City's collective bargaining agreements,
- Vivian Van Story spoke of missed outreach and educational opportunities in schools, and that the Philadelphia Housing Authority needs to recycle better. She also suggested that Barbara Moore, PHA's sustainability director, should be invited to join SWRAC.
- Maurice Sampson recommended that the Streets Department and SWRAC to extent possible provide resources to schools even in lieu of a district-wide strategy. He mentioned schools workshops, and that they should form goals around waste diversion and reduction.

ARI also distributed a survey sheet that asked meeting participants to rank and comment on various solid waste management issues (results attached).

**Announcements:**

There were no announcements.

**Adjournment:**

The meeting was adjourned at approximately 4:15 p.m.

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Submitted,

Conisha Davis (Recording)

DRAFT



**August SWRAC Meeting**  
**Recycling Plan Discussion**  
8/18/14

**VISION:** *Overall vision statement for Recycling Plan.*

1) Overall-City:

- Philadelphia as a leader in innovation and sustainability.
- SW & R Plan should strive to sustain and enhance quality of life for the community
  - Cleaner waste streams
  - Public health and safety
  - Protecting the land, air and water
- Shared responsibility: City, residents/community, and business
  - Equitable distribution of costs and burdens
- Continuous focus on education and outreach
  - Identify community stakeholders, assign accountability and support

2) Proactive Management of the Waste Stream:

- Decrease waste disposal and grow recovery of recyclables
  - Change waste management to total materials management (on front end)
    - Manufacturer responsibility and policies: better manage waste stream on front end proactively
    - Rethink procurement policies to better affect processes
  - Look at materials management strategies to maximize recoverables as economic opportunities
    - Integrate with economic development strategies
    - Maximize revenue
    - Minimize cost
    - Local job creation and sustainability
  - Consider metrics/analytics
    - Need to be adaptable for changes in commodity marketplace

- Organics/Composting: figure out way to capture organics in waste stream
- Consider more E-waste collection options

**BREAKOUT SESSION #1: Recycling Program and Initiatives - A detailing of the programs and efforts employed to meet the 35% Act 101 goal**

1) Aspects of the Program (residential, commercial, institutional, public space)

- Ongoing recycling education (how and what to recycle)
- Consider pay as you go options/pilots
  - Pioneer model that works for Philadelphia
- Separate glass recycling stream (for material value, less contamination)
  - Does this hurt single stream mindset already established?

2) Public-Private Partnerships

- Business and Institutional waste audits
  - Educate, promote, and compel
  - Policy creation for more rigorous review and sharing of waste stream data
  - Encourage shift to organics
- Challenge companies/manufacturers to think of recycling or second life benefit of their products/packaging
  - Identify problem items in waste stream and work with companies to develop creative solutions
  - Encourage proper front end management of material
- Educational institutions
  - Mandate education programs and recycling programs in elementary schools
  - Develop waste stream management curriculum and programs for HS and colleges
  - Encourage student involvement in cleanup and citywide recycling initiatives
    - Consider Recyclemania model applications

3) Other materials and organics

- Add Construction and Demolition (C&D) waste
  - Expand collection sites, education, policies, enforcement, and partnerships. Consider pilot programs, Big Box Retailer partnerships, other City Departments (L+I), etc.
- Add organics
  - On-site composting
  - Collection areas for residents (public space, community gardens, collection centers)
  - Pilot program
  - Bio bins

**BREAKOUT SESSION #2: Public Participation** - *Review and detailing of advertisements, hearing minutes, SWRAC meetings, etc.*

1) Transparency and Accuracy:

- Need for flexibility of messaging for wide-ranging target audiences
- Mix of media approaches to engage spectrum of targets (use of new/social media with traditional media approaches)
- Need for ongoing messaging
  - Use community partners and schools for ongoing education
  - Better coordinate with all City agencies and partners
    - Provide consistent education tool (resource guide)

2) Communication and Education

- Overall goal should be to change behavior
- Recognize power of younger target (grade school children) to engage entire household in proper recycling behaviors
  - Embrace emerging technologies
- Messaging options
  - Enforcement vs. positive messaging
  - Emphasize community successes and progress
  - Show future impact of material use and current behavior
- Need for simple, easily understood messaging, encouraging simple and easy behavior changes

### 3) Public Outreach

- Community events and meetings
- One-on one education, word of mouth

## **BREAKOUT SESSION #3: MSW Management Program and Technologies**

### 1) Technology

- The EPA Waste Management Hierarchy is endorsed as a guiding principle for selecting waste management technologies.
- This means a greater emphasis on waste reduction (minimize front end input) and treating disposal as a last resort.
- Specific emerging technologies/techniques that should be addressed
  - Spec Fuel: Goal or stop-gap? (evaluate based on EPA model)
  - Mixed waste processing (Dirty MRF)
    - Reduces quantity and quality of recovered materials in general waste stream, undoes years of public education around waste
    - Understand where the model could/should be used with care/relevancy in small cases or specific waste streams
  - Organics management strategies: Composting and Anaerobic Digestion both will have a role in diversion.
- A greater focus on improving the quality of recovered material

### 2) Policy considerations

- Consider reviving/changing City procurement processes to better manage front end material development
- Re-initiate “Buy Recycled” program for City agencies
- Consider creating incentives or requirements for city contractors to use recycled/recyclable products
- Identify legal barriers for private sector management of organics

**BREAKOUT SESSION #4: Implementing Entity** – *Who is responsible for implementing plan on behalf of jurisdiction?*

1) Streets and Other Stakeholder Groups: Need to identify all stakeholder groups, assign responsibilities, foster coordination and provide consistency of message (resource guide / toolkit). Groups include:

- STREETS Dept.
- RecycleBank
- Keep Philadelphia Beautiful (KPB)
- Philadelphia More Beautiful Committee (PMBC)
- PennFuture
- PWD
- Mayor’s Office of Sustainability
- City Procurement Dept.
- Philadelphia Airport
- Philadelphia Housing Authority
- Commerce Department
- School District
- Parks and Recreation
- City Council
- 311
- Police and Fire Departments

2) Private Involvement: Identify potential private partners for assistance in education, embracing of proper methods and resources. Need to foster coordination and provide consistency of message (resource guide / toolkit).

Those include:

- Universities and Colleges
- Corporate (Comcast, Lincoln Financial, Sports teams, etc.)
- Local Business
  - Business Corridors
  - CDCs
  - Landlords / Property Owners (need education, policy and enforcement for this group)
- Environmental Community

- Public Domain: need joint responsibility to ensure clean areas and public health and safety

3) Resources and Capacity: Recognize that the City and STREETS Dept. cannot be responsible for all aspects of plan execution and direction, will need support, assistance and resource help to achieve all plan goals.

- Prioritization of Responsibilities
- The Bin: City cannot continue to “re-bin” over and over again
  - New policy
  - Corporate partner to fund larger bin
- Provide public space and under used facilities for private contractors and citizens to use as holding areas / transfer stations for new material collections
- Recognize resources: engage passionate citizens and experts in the community to champion effort
- Better coordination and leadership
  - City leadership to embrace effort
  - City employees
  - Create network of reliable CDCs
- Evolve RB Rewards program to make more Philly-specific/relevant (e.g. cost off water bill, etc.)

4) SWRAC Organizational Roles Moving Forward (post plan creation):

Recognize the positive impact of engaging passionate citizens and experts and including them in the planning process

- Plan implemental oversight
- Media outreach
- Ability to evaluate and adapt plan over time
- Annual reports
- Evaluate emerging technologies
- Holding bank for all ongoing initiatives
- Foster advocates and partnerships
- Sub-committee creation and direction for specialized content development



**City of Philadelphia Solid Waste & Recycling Advisory Committee (SWRAC)**

**Meeting Agenda: September 25, 2014, at 3 p.m.**

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- Call to order & roll call (M. Feldman/staff)
  
- Update on solid waste management plan schedule (staff)
  
- Group review and discussion of June and August facilitated discussions
  
- Discussion of SWRAC short term and long term next steps
  
- Next meeting / Other Announcements
  
- Adjourn

**MEETING LOCATION:**

Municipal Services Building,  
Innovation Lab, 16th Floor Rooms C & D  
1401 John F. Kennedy Blvd, Philadelphia, PA 19102

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** October 30, 2014

**ATTENDEES:**

SWRAC Members Present

Michele Feldman, Keep Philadelphia Beautiful  
Phil Bresee, Streets Department/Recycling Office  
Sal Iadonisi, United States Recycling, Inc.  
Paul Kohl, Philadelphia Water Department  
Maurice M. Sampson II, Niche Recycling  
Vivian Van Story, Community Land Trust Corporation  
Bob Anderson, ReCommunity Recycling  
Katherine Gajewski, Mayor's Office of Sustainability  
Joe Minot, Clean Air Council  
Charles Raudenbush, Waste Management  
Fern Gookin, Revolution Recovery

SWRAC Members Absent

Debbie Zimmer, Dow Chemical  
Andrew Sharp, PennFuture  
Jack Embick, Environmental Law  
Dan Garafolo, University of Pennsylvania

Others Present

Danielle Bower, Philadelphia Intl. Airport  
Laura Cassidy, Philadelphia Prisons System  
Rebecca Barnes, Drexel University  
Frank Kikuyu, Drexel University  
Dylan Wells, Niche Recycling  
Logan Welde, Clean Air Council  
Mike Roles, Clean Water Action  
Mike Giuranna, US EPA Region III

City Staff/Consultants

Scott McGrath, Director of Environmental Services, Streets Dept.  
Ian Hegarty, Recycling Planner, Streets Dept.  
Jim Osborn, ARI  
Virginia Cain, Recyclebank/Philly Recycling Rewards  
Shawn McMonagle, Office of City Councilman Mark Squilla  
Shoshanna Bricklin, Office of City Councilwoman Cindy Bass

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**Call to order/introductions:**

The meeting was called to order by SWRAC co-chair Michelle Feldman at approximately 3:10 p.m.

## **Minutes:**

Approval of minutes from the September 25<sup>th</sup> SWRAC meeting was deferred.

## **Discussion of City Council Initiatives:**

Plastic Bags – Katherine Gajewski introduced Shawn McMonagle from Councilman Squilla’s office who addressed SWRAC on upcoming plastic bags legislation. The proposal, as it is being considered at this time, would levy a fee on single-use plastic bags and paper bags. McMonagle and Gajewski shared findings from review of other jurisdictions’ approaches, the legislation’s reach, exempted packaging, potential legislative pathways, and asked for feedback. SWRAC member comments included:

- Maurice Sampson recommended that paper bags not be targeted due to their recyclability.
- Vivian Van Story expressed concerns that lower income residents would be impacted disproportionately through a bag fee.

Organics – Phil Bresee reminded the SWRAC of the November 12<sup>th</sup> City Council Streets & Services and Environment Committees joint hearing on organics. The hearing is in response to a resolution introduced by Councilwoman Cindy Bass.

Bresee distributed previous SWRAC comments on organics management, and he and Gajewski led group discussion. Bresee noted that SWRAC co-chairs will be invited by Council to provide testimony.

SWRAC members provided feedback on organics management options for presentation by SWRAC co-chair Michelle Feldman at the Nov. 12<sup>th</sup> hearing.

## **New Business:**

Scott McGrath discussed the Streets Department’s Fall Leaves collection program which will run from November 10<sup>th</sup> through December 19<sup>th</sup>. Key elements of the program include a return to vacuum collections from thick tree canopy parts of the City, as well 22 drop-off locations for bagged leaves. Leaves set out for collections will be picked up with regular trash.

Mr. McGrath and Bresee noted that the City’s leaf vacuum programs have historically captured more recoverable leaves than the curbside pickup program (~4,000 tons to ~1,200 tons).

## **Old Business:**

“Recycle Right” – Bresee provided update the City’s “Recycle Right” outreach initiative. The program is multi-media with a focus on transit ads and web-based ads, using the “I’m Behind Recycling” motif. The Streets Department has also increased random inspections of recyclables loads, and has instituted additional route crew training efforts. Bresee also noted the wide range of City publications and 3<sup>rd</sup>-party platforms that display Philadelphia’s recycling information. The Recycling Office is working to ensure consistent messaging across all platforms.

New Recyclables Processing Contract – Bresee informed SWRAC that the City’s new contract with ReCommunity Recycling became effective October 1<sup>st</sup>. Curbside recyclables from the City will be delivered to ReCommunity’s MRF on Ellsworth Street, off of Grays Ferry Avenue. The MRF was previously known as Blue Mountain Recycling. Bresee emphasized that there are no changes to the materials accepted in the City’s curbside recycling program. However he did refer back to the “Recycle Right” campaign, and did note that there may be more or less emphasis placed on different materials.

Solid Waste Management Plan Update – McGrath distributed a new schedule for completion of the SW plan. Targeted completion date is March, 2015. Jim Osborn of ARI provided update on status of various chapters. Bresee added that staff and ARI were taking comments provided by SWRAC at June and August visioning sessions and incorporating them into appropriate sections in the draft plan.

**Announcements:**

Michelle Feldman announced the Streets/KPB/Recyclebank social media campaign, which is inviting Philadelphians to post pictures demonstrating how they are keeping Philadelphia Beautiful. Participants will earn Recyclebank points, and be eligible for a prize too.

Michelle Feldman and Virginia Cain of Recyclebank announced that there would be a multi-partner event held at Dillworth Park in honor of America Recycles Day on November 13<sup>th</sup> at 11 a.m. Participants will include Keep America Beautiful, KPB, Recyclebank, ReCommunity, PECO, the Mayor’s Office of Sustainability, EPA’s Region 3 office, and the Streets Department.

**Adjournment:**

Meeting was adjourned at approximately 4:30 p.m.

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Submitted,

Vanessa M. Davis,  
Recording

ATTACHMENTS

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** December 11, 2014

**ATTENDEES:**

SWRAC Members Present

Jack Embick, Environmental Law  
Michele Feldman, Keep Philadelphia Beautiful  
Phil Bresee, Streets Department/Recycling Office  
Maurice M. Sampson II, Niche Recycling  
Charles Raudenbush, Waste Management  
Fern Gookin, Revolution Recovery  
Debbie Zimmer, Dow Chemical

SWRAC Members Absent

Bob Anderson, ReCommunity Recycling  
Andrew Sharp, PennFuture  
Dan Garafolo, University of Pennsylvania  
Jeff Cardwell, Philadelphia School District  
Katherine Gajewski, Mayor's Office of Sustainability  
Paul Kohl, Philadelphia Water Department  
Sal Iadonisi, U.S. Recycling

Others Present

Dylan Wells, Niche Recycling  
Julian Goresko, University of Pennsylvania  
Miriam Enriquez, Office of City Council Member Dennis O'Brien  
Francine Locke, Philadelphia School District  
Megan Garner, Philadelphia School District  
Mike Roles, Clean Water Action  
Mike Giuranna, US EPA Region III  
Shannon Detweiler, ReCommunity Recycling

City Staff/Consultants

Scott McGrath, Director of Environmental Services, Streets Dept.  
Ian Hegarty, Recycling Planner, Streets Dept.  
Jim Osborn, ARI

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**Call to order/introductions:**

The meeting was called to order by SWRAC co-chair Michelle Feldman at approximately 3:10 p.m.

**Minutes:**

Meeting minutes from June 19<sup>th</sup>, August 18<sup>th</sup>, and October 30<sup>th</sup> were approved by voice vote.

## **Recap of November 12 City Council Hearing on Organics:**

City staff reported that the hearing testimony has been uploaded to the SWRAC's drop-box folders. Staff also indicated that they will be submitting a request for grant monies from PA DEP for funding of a comprehensive organics study. Discussions with PA DEP were positive, and staff will update SWRAC on the process during the January meeting.

Maurice Sampson reported that he had been privy to follow-up discussions with City Council members and that the reactions to the hearing have been positive. Mr. Sampson noted too that private sector potential and market development of organics infrastructure appears to have the most interest among City Council members at this point.

## **Commercial Recycling Regulations Discussion/Action:**

Ian Hegarty from the Recycling Office delivered a presentation that detailed ongoing and planned commercial recycling initiatives, as well as associated challenges. Key points raised during presentation and follow-up discussion included:

- Estimated MSW generation by sector in Philadelphia in 2013 was 60.2% for commercial/institutional; 15.3% for construction and demolition debris; and 24.5% for residential. Some 48% of overall MSW was recycled, with 25% being disposed on through combustion and 27% through land filling.
- The C&D sector has an estimated 94% recycling rate. Overall commercial recycling rate in 2013 was 56.4% when C&D is counted and 46.7% when it is excluded.
- The Recycling Office is initiating a program designed to increase access to recycling in multifamily buildings.

The Recycling Office discussed potential legislative and regulatory actions to improve commercial recycling, including:

- A proposed amendment to the City Code to require businesses that receive municipal collection to file a recycling plan;
- Proposed amendments to Streets Department regulations to specify diverted materials, minimum recycling capacities, and minimum signage requirements for commercial properties.

Discussion following the presentation addressed the particulars of the multifamily recycling program, including the following points:

- Maurice Sampson recommends consultation with waste and recycling haulers;
- For the pilot, the Office selected buildings that were owned by operators with the greatest number of units in the City.
- The operators will be contacted and offered education materials for tenants. Inspections will follow the initial outreach.

Miriam Enriquez, legislative director for Councilman Dennis O'Brien's office, discussed Council Bill No. 140903 (O'Brien/Bass). Ms. Enriquez explained that the bill would amend the City Code section regulating dumpsters to better accommodate modern waste practices including food waste segregation, BioBins, and compactors with low collection frequency. A hearing in front of the Streets and Services Committee has been tentatively set for February 6<sup>th</sup> at 10:00am.

**Draft Solid Waste Plan Update:**

Staff announced that a first draft of the 2014-2024 Solid Waste Management Plan will be provided to PA DEP by the end of December. The draft includes SWRAC input from the June and August visioning sessions. Staff will post the document in the SWRAC's drop-box folder.

**Announcements/Updates:**

Staff and the SWRAC co-chair provided a recap of the America Recycles Day event from November 13<sup>th</sup> at Dillworth Park. There were participants and speakers from the City of Philadelphia, Keep Philadelphia Beautiful, Keep America Beautiful, ReCommunity, Recyclebank, PECO and US EPA Region 3. The event garnered some positive press coverage in the Philadelphia *Inquirer* and Philadelphia Magazine.

The Recycling Office announced that it now has its own Facebook page and also has an enhanced presence on Twitter.

Co-chair Michelle Feldman reminded SWRAC members of the [Streets/KPB/Recyclebank social media campaign](#), which is inviting Philadelphians to post pictures demonstrating how they are keeping Philadelphia Beautiful. Participants will earn Recyclebank points, and be eligible for a prize too.

**Adjournment:**

The meeting was adjourned at approximately 4:45 p.m.

Submitted,

Recording

ATTACHMENTS

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** February 5<sup>th</sup>, 2015

**ATTENDEES:**

SWRAC Members Present

Michele Feldman, Keep Philadelphia Beautiful  
Bob Anderson, ReCommunity Recycling  
Phil Bresee, Streets Department/Recycling Office  
Jack Embick, Environmental Law  
Paul Kohl, Philadelphia Water Department  
Sal Iadonisi, U.S. Recycling  
Charles Raudenbush, Waste Management  
Maurice M. Sampson II, Niche Recycling  
Debbie Zimmer, Dow Chemical

SWRAC Members Absent

Jeff Cardwell, Philadelphia School District  
Katherine Gajewski, Mayor's Office of Sustainability  
Dan Garafolo, University of Pennsylvania  
Fern Gookin, Revolution Recovery

Others Present

Aaratquika Bose, Office of City Council Member Cindy Bass  
Danielle Bower, Philadelphia International Airport  
Matthew Braden, Office of City Council Member Dennis O'Brien  
Shoshanna Bricklin, Office of City Council Member Cindy Bass  
Laura Cassidy, Philadelphia Prison System  
Kendall Christensen, Gaia Consulting  
Tamika Davis, Philadelphia International Airport  
Megan Garner, Philadelphia School District  
Mike Giuranna, US EPA Region III  
Francine Locke, Philadelphia School District  
Dylan Wells, Niche Recycling

City Staff/Consultants

Scott McGrath, Director of Environmental Services, Streets Dept.  
Ian Hegarty, Recycling Program Planner, Streets Dept.  
Jim Osborn, ARI  
Allison Sands, Recyclebank  
Virginia Cain, Recyclebank

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**Call to order/introductions:**

The meeting was called to order by SWRAC co-chair Michelle Feldman at approximately 3:05 p.m.

**Minutes:**

Meeting minutes from December 11<sup>th</sup>, 2014 were approved by voice vote.

**Organics Recycling Update:**

Feasibility Study - Staff reported receiving positive reaction from PA DEP on the possibility of awarding a 901 Grant to conduct an organics recycling feasibility study. The project will most likely be coordinated through Alternative Resources, Inc., with participation by MSW Consultants, Inc.

The project will be divided into phases, including overall data review and background, a marketplace assessment, reviews of processing options, etc.

Staff indicated that the consulting team will look to meet with SWRAC for input on its perspective.

Plans are to have the initial project phase complete in the next couple of months, with the work on the balance of the project occurring once FY 2016 begins in July.

Council Bill No. 140903 (O'Brien/Bass): A hearing on the "dumpster bill" introduced by Council members Dennis O'Brien and Cindy Bass will be held by City Council's Streets and Services Committee on February 10<sup>th</sup> at 10 a.m. The bill is being introduced to accomplish three main things:

- Cleans up and reorganizes code; retains requirements that grindable garbage (aka food waste) be handled by a disposer, or composted;
- Identifies organics composting and anaerobic digestion as forms of recycling, which allows them to be licensed at the same rates as 'traditional' recycling dumpsters (cardboard, paper, single-stream, etc.). Differences in licensing fees are:

- Private Property:
 

Size	Garbage	Recycling
<1 yd3	\$80	\$40
>1 yd3	\$150	\$75
- Public Right-of-Way:
 

Size	Garbage	Recycling
<1 yd3	\$200	\$100
>1 yd3	\$500	\$250

- Allows for minimum collection frequency exception for aerated organics dumpsters, or compactor dumpsters (must be emptied every 30 days vs. multiple times per week). Collection frequency can be increased based on order by Fire, Health, L&I, or Streets Department.

Bresee mentioned that he will be testifying in support of the bill on behalf of the Administration. Maurice Sampson noted that he too will be providing supporting testimony. Matthew Braden from Councilmember O'Brien's office thanked the SWRAC for their previous input on organics recycling.

### **Draft Solid Waste Plan Update:**

Staff announced that a first draft of the 2014-2024 Solid Waste Management Plan was provided to PA DEP. All chapters were included, with exception to chapters four and five. Chapter four details the recycling program and its history, and is being finalized by staff. Chapter 5 is the heart of the plan, and ARI and staff are incorporating SWRAC input. Staff will post the document in the SWRAC's drop-box folder.

### **Announcements/Updates:**

The City's *fall/winter leaf recycling campaign* collected 1,470 tons of leaves. Some 21 tons of Christmas trees were collected through that program in January. Staff indicated they would find tonnages from the various civic organizations that sponsor their own events.

Virginia Cain and Allison Sands from the Recycling Rewards team spoke about the *2015 Green Schools Program*. Last year, Recyclebank and project sponsors awarded more than \$30,000 in grants for environmental projects in 12 Philadelphia Schools. This year, 14 Philadelphia schools have been recognized. Rewards program members are encouraged to donate points to schools to help them raise additional funds and were directed to this website: <https://www.recyclebank.com/about-us/green-schools>

The City launched a new outreach tool with *Recycle by City*; a startup website that presents recycling information from cities across the U.S. Bresee remarked that they were pleased with the site's visual appeal and easy interface. He also indicated the site will help drive internet traffic back to the Streets Department's website, as well as program partner sites such as KPB, Recyclebank, ReCommunity, etc. The website is: [www.recyclebycity.com/philadelphia](http://www.recyclebycity.com/philadelphia)

A discussion on the status of *recyclables end-markets* was held. Markets challenges persist, and include weak demand for recovered materials from Chinese export markets and their insistence on better quality standards (Operation "Green Fence"). More recently, labor disputes at West Coast ports have led to work stoppages and significant loading and shipping delays, impacting recovered materials dealers' abilities to export recyclables. Additionally, the steep decline in oil prices during the fall and winter has made use of recovered plastics in manufacturing less competitive, and has pushed plastic prices lower.

### **Adjournment:**

The meeting was adjourned at approximately 4:45 p.m.

### **Next Meeting:**

Staff indicated that SWRAC meetings will return to a set schedule. Regular meetings will now be held on the fourth Thursday of each month. The next meeting is set for February 26<sup>th</sup>.

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** February 26<sup>th</sup>, 2015

**LOCATION:** School District of Philadelphia Central Offices, 440 N. Broad Street

**ATTENDEES:**

SWRAC Members Present

Bob Anderson, ReCommunity Recycling  
Phil Bresee, Streets Department/Recycling Office  
Jack Embick, Environmental Law  
Paul Kohl, Philadelphia Water Department  
Sal Iadonisi, U.S. Recycling  
Maurice M. Sampson II, Niche Recycling  
Debbie Zimmer, Dow Chemical  
Fern Gookin, Revolution Recovery

SWRAC Members Absent

Jeff Cardwell, Philadelphia School District  
Katherine Gajewski, Mayor's Office of Sustainability  
Dan Garafolo, University of Pennsylvania  
Charles Raudenbush, Waste Management  
Michele Feldman, Keep Philadelphia Beautiful  
Vivian Van Story, Community Land Trust Corp.

Others Present

Mike Roles, Clean Water Action  
Matthew Braden, Office of City Council Member Dennis O'Brien  
Laura Cassidy, Philadelphia Prison System  
Mike Giuranna, US EPA Region III  
Francine Locke, Philadelphia School District  
Dylan Wells, Niche Recycling  
Shannon Detweiler, ReCommunity  
Kemry Heinold, Rehrig Pacific  
Tim Bennett, Bennett Compost  
Bob Bylone, PA Recycling Markets Center  
Jack Himes, PA Recycling Markets Center  
Lisa Thresher, US EPA  
Veronica Harris, Montgomery County, PA  
David Newman, Newman Paperboard

City Staff/Consultants

Scott McGrath, Director of Environmental Services, Streets Dept.  
Ian Hegarty, Recycling Program Planner, Streets Dept.  
Jim Osborn, ARI  
Allison Sands, Recyclebank  
Virginia Cain, Recyclebank

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**Call to order/introductions:**

The meeting was called to order by SWRAC co-chair Michelle Feldman at approximately 3:05 p.m.

**Minutes:**

The meeting minutes from February 5<sup>th</sup> were approved by voice vote.

**Presentation:**

Bob Bylone, executive director of the Pennsylvania Recycling Markets Center (PARMC) gave a presentation on the organization's formation, structure and mission areas. Jack Himes, also from the PARMC, delivered a presentation on E-Scrap industry challenges, particularly in Pennsylvania. A key portion of Mr. Himes' presentation focused on Pennsylvania's Covered Device Recovery Act (CDRA).

The presentations will be made available to SWRAC in the drop-box folder.

**Organics Recycling Updates:**

Phil Bresee provided updates to recent organics recycling discussion topics:

*Organics Recycling Feasibility study* – Staff has received tentative OK from PA DEP for use of Act 101 Section 901 grant monies. Bresee reported that timing of the bulk of study will be pushed back into the summer (FY 2016) due to budgetary constraints. However, it is possible that introductory portions could be tasked and accomplished sooner.

The project consultants will be Alternative Resources, Inc. and MSW Consultants. Staff and the consultants have yet to finalize a scope of services and determine which firm will be responsible for portions of the study. Likely project scope areas will include reviews of existing organics recycling processing capacity, key players, end-market capacity and uses, infrastructure reviews, legislative approaches, and collection options.

*Council Bill No. 140903 (aka the O'Brien & Bass "dumpster bill")* – This was passed by City Council 16-0 on the bill's second reading on February 19<sup>th</sup>. Staff delivered testimony on the bill at a February 10<sup>th</sup> hearing of the Streets and Services Committee. The legislation was delivered to the Mayor's office and is awaiting his signature. Bresee indicated that the Streets department will need to craft regulations. \

SWRAC members entered into a discussion on the formation of an organics recycling subcommittee in order to further discuss and make potential recommendations to the full SWRAC on organics recycling issues. Bresee indicated that the Streets Department would be supportive of that and that non-SWRAC members would be eligible to participate so long as there is a member, non-member balance. Maurice Sampson polled meeting attendees on their interest in participating with the following individuals indicating yes:

Michael Roles  
Tim Bennett  
Paul Kohl  
Matt Braden

Mike Giuranna  
Dylan Wells  
Maurice Sampson

Bresee said that he would send out at meeting notice and host at MSB before the next SWRAC meeting.

**Solid Waste Management Plan Update:**

Bresee and Jim Osborn from ARI reported that chapters 1 through 4 of the draft SW plan have been submitted to DEP. They explained that Chapter 5, which is the heart of the plan, still needs to be refined, including having SWRAC feedback incorporated into it. Bresee reported that staff would upload completed draft chapters into the SWRAC drop-box folder in advance of the March meeting.

**Adjournment and Next Meeting:**

The meeting was adjourned at approximately 4:30 p.m. The next regularly scheduled meeting will be held on March 26<sup>th</sup>.

**MEETING MINUTES:** City of Philadelphia Solid Waste & Recycling Advisory Committee (SWRAC)

**DATE:** March 26<sup>th</sup>, 2015

**LOCATION:** City of Philadelphia Municipal Services Building

**ATTENDEES:**

SWRAC Members Present

Bob Anderson, ReCommunity Recycling  
Phil Bresee, Streets Department/Recycling Office  
Jack Embick, Environmental Law  
Michelle Feldman, Keep Philadelphia Beautiful  
Paul Kohl, Philadelphia Water Department  
Sal Iadonisi, U.S. Recycling  
Maurice M. Sampson II, Niche Recycling  
Vivian Van Story, Community Land Trust Corp.

SWRAC Members Absent

Jeff Cardwell, Philadelphia School District  
Katherine Gajewski, Mayor's Office of Sustainability  
Dan Garafolo, University of Pennsylvania  
Charles Raudenbush, Waste Management  
Debbie Zimmer, Dow Chemical  
Fern Gookin, Revolution Recovery

Others Present

Katie Bartollata, PennFuture  
Wayne Bowen, Pennsylvania Recycling Markets Center  
Michael Roles, Clean Water Action  
Laura Cassidy, Philadelphia Prison System  
Mike Giuranna, US EPA Region III  
Dylan Wells, Niche Recycling  
Kemry Heinold, Rehrig Pacific

City Staff/Consultants

Scott McGrath, Director of Environmental Services, Streets Dept.  
Jim Osborn, ARI  
Allison Sands, Recyclebank/Recycling Office  
Virginia Cain, Recyclebank/Recycling Office

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**Call to order/introductions:**

The meeting was called to order by SWRAC co-chair Michelle Feldman at approximately 3:10 p.m.

**Minutes:**

Phil Bresee recommended that SWRAC defer action on the February 26<sup>th</sup> meeting minutes until the March meeting.

**Presentation:**

Wayne Bowen of the PA Recycling Markets Center delivered a presentation on his organizations role in helping develop end-markets for organics recycling in PA. Mr. Bowen's presentation will be made available to SWRAC in the drop-box folder.

**Legislative Updates:**

Phil Bresee reported that Council Bill No. 140903 (aka the O'Brien & Bass "dumpster bill") was signed into law by the Mayor. Streets Department staff will now need to examine and draft accompanying regulation.

Michelle Feldman spoke of the two anti-litter bills introduced (Bills 150198 & 150199, both introduced by Councilmembers Reynolds-Brown, Bass, and Squilla): one that places additional trash receptacle requirements on commercial entities serving food products, and one that places additional trash receptacle requirements on landlords of properties with more than six units.

**Solid Waste Management Plan Update:**

Several copies of the 2014-2024 Municipal Waste Management Plan (working draft dated 3-24-15) were made available at the meeting to illustrate progress in preparation of the document in accordance with PADEP requirements. It was noted that work is continuing on Chapter 5 Selection and Justification of Municipal Waste Management Program. Jim Osborn of ARI explained that the working draft has been updated to reflect 2013 solid waste data now available.

Except for Chapter 5, Chapters 1-13 of the working draft will be uploaded to the drop box.

**Announcements/Updates:**

Phil Bresee and Michelle Feldman reported that the SWRAC organics subcommittee met earlier in the day.

Phil Bresee announced that Ian Hegarty of the Recycling Office had recently taken a position with the City Planning Commission.

Scott McGrath provided an update on the Philly Spring Cleanup (PSC) and mentioned that as of earlier in the day some 596 projects had been registered, an amount that exceeds the 2014 total of 569. He also said that the project registration deadline was March 31<sup>st</sup>. The PSC event is set for Saturday, April 12<sup>th</sup>. The Block Captain Rally was held on Saturday, March 14<sup>th</sup> and that the Germantown area would be the focus of the day-of kick-off and press events.

Virginia Cain of Recyclebank & the Recycling Office updated SWRAC on the following:

- Streets Department, Recyclebank and KPB's Philly Spring Cleanup project in partnership with New Kensington CDC ;
- Changes made to the Streets Department website;

- The Carton Council pilot educational project Recyclebank, Streets and KPB are working on (that consists of presentations in five schools, followed by meetings with school staff around how we can be of assistance with recycling efforts).

**Adjournment and Next Meeting:**

The meeting was adjourned at approximately 4:30 p.m. The next regularly scheduled meeting will be held on April 23<sup>rd</sup>.

**MEETING NOTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC),  
ORGANICS RECYCLING SUBCOMMITTEE

**DATE:** March 26, 2015

**ATTENDEES:**

Michele Feldman, Keep Philadelphia Beautiful  
Phil Bresee, Streets Department/Recycling Office  
Paul Kohl, Philadelphia Water Department  
Maurice Sampson, Niche Recycling  
Mike Giuranna, US EPA Region 3  
Melissa Pennington, US EPA Region 3  
Matthew Braden, Office of Councilman Dennis O'Brien  
Laura Cassidy, Philadelphia Prisons System  
Dylan Wells, Niche Recycling

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The meeting began at approximately 10 a.m. Meeting attendees shared their reasons for participating and actionable goals they might like to see accomplished including research and identification of ways to support a robust organics recycling infrastructure in Philadelphia.

Phil Bresee presented a situational report prepared for the Streets Department prior to the November, 12<sup>th</sup> City Council organics recycling hearing. The report detailed estimated tonnages of organic materials in both the residential and commercial solid waste streams. Bresee gave an overview on the sources for the data, the methodology, etc. The report also included a summary of existing organics recovery initiatives, as well as organics recycling/processing technologies. The report used 2012 data, but Bresee indicated he would update it to include 2013's statistics.

There were discussions over whether there was any data estimating the amount of food waste that is disposed of in in-sink disposers. It was suggested that those totals might be significant, especially because City code requires food-serving establishments to install in-sink disposers/grinders. Bresee responded that this information was not available, and that he was unaware of any MSW composition studies that identified this.

Bresee indicated DEP had given verbal approval for an Act 101, Section 901 grant to fund an organics recycling feasibility study. He said the next step was to schedule the pre-application meeting with DEP. He gave a brief summary of the proposed scope for the upcoming organics feasibility study. It will focus on organics processing capacity, end-markets and uses, technologies (anaerobic digestion vs. more traditional composting), collections, legislative approaches, etc. He reported that the scope had not been finalized and that staff and consultant will discuss with the subcommittee prior to doing so. Bresee added that the study will be in the \$100,000 range, which is an amount high enough to result in a comprehensive analysis.

Michelle Feldman agreed to prepare a draft mission statement for meeting participant review and comment.

**MEETING MINUTES:** City of Philadelphia Solid Waste & Recycling Advisory Committee (SWRAC)

**DATE:** April 23, 2015

**LOCATION:** City of Philadelphia Municipal Services Building

**ATTENDEES:**

SWRAC Members Present

Bob Anderson, ReCommunity Recycling  
Phil Bresee, Streets Department/Recycling Office  
Michelle Feldman, Keep Philadelphia Beautiful  
Fern Gookin, Revolution Recovery  
Paul Kohl, Philadelphia Water Department  
Sal Iadonisi, U.S. Recycling  
Maurice M. Sampson II, Niche Recycling  
Vivian Van Story, Community Land Trust Corp.

SWRAC Members Absent

Jack Embick, Environmental Law  
Katherine Gajewski, Mayor's Office of Sustainability  
Dan Garafolo, University of Pennsylvania  
Charles Raudenbush, Waste Management  
Debbie Zimmer, Dow Chemical

Others Present

Wayne Bowen, Pennsylvania Recycling Markets Center  
Matt Braden, Councilman Dennis O'Brien's office  
Mario Cimino, Pennsylvania Resources Council  
Megan Garner, School District of Philadelphia  
Mike Giuranna, US EPA Region III  
Sara King, University of Pennsylvania  
Michael Roles, Clean Water Action

City Staff/Consultants

Scott McGrath, Director of Environmental Services, Streets Dept.  
Jim Osborn, ARI  
Allison Sands, Recyclebank/Recycling Office  
Virginia Cain, Recyclebank/Recycling Office

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**Call to order/introductions:**

The meeting was called to order by Michelle Feldman at approximately 3:10 p.m.

**Minutes:**

Minutes from the March 26<sup>th</sup> meeting were approved by consent.

## **Announcement of new SWRAC co-chair**

It was announced that Fern Gookin of Revolution Recovery will be serving as the SWRAC co-chair.

## **Presentations (2)**

***School District of Philadelphia's GreenFutures Program:*** Megan Garner of the School District of Philadelphia delivered a presentation on new recycling program being implemented by the district. Highlights included:

- Weekly recycling pickup available through Streets Department at curbside; however institutional settings should be picked up through carts or dumpsters.
- GreenFutures is SDP Sustainability Plan; to be released Summer, 2015
- Five pillars (education, efficiencies, engagement, environment, equity.)
- Consumption and Waste Subcommittee has been meeting.
- Republic Services is SDP's contractor; recycling services negotiated.
- Recycling Office won technical assistance grant from PA DEP which allowed them to conduct a review of their contract and container volumes.
- 40 schools set to begin recycling under program in May, with rest to come on-line by the end of 2015.
- SDP, along with help from the Recycling Office, Recyclebank, Keep Philadelphia Beautiful, and other partners has created an interactive toolkit and recycling inventory guide for schools.

## ***FY 2015 Curbside Recycling Trends (Phil Bresee):***

- For first half of FY 2015, curbside recycling yields are down 7% year over year; total residential MSW generation is level.
- Changes in packaging and less newspaper probably catching up; consistent with national trends.
- Outreach has focused more on "recycling right", so hopefully a higher-quality recycling stream is being collected.
- Sanitation Operations has also cracked down on mixing of recyclables with garbage on collection routes. Bresee estimates this has had the biggest impact. We are recycling less, but recycling better.
- Staff will continue to keep SWRAC updated on trends.

## **Organics Subcommittee Report:**

Mike Giuranna delivered report for subcommittee.

- Mission statement was agreed to.
- Subcommittee to meet monthly, Tuesday preceding the regular SWRAC meeting.
- Discussed feasibility study and suggested components (benchmarking of other programs, quality control issues, Fairmount Park, technologies, etc.)

## **Other Announcements/Updates:**

- Philly Spring Cleanup Results included 723 projects, 14,460 volunteers, 836,100 lbs. of trash removed,
- New Sanitation Convenience Center has opened at 5100 Grays Avenue

- Streets Department will be holding a Household Hazardous Waste drop-off event on Saturday, April 25<sup>th</sup>

**Adjournment and Next Meeting:**

- Next Meeting Set for May 26<sup>th</sup>

**SWRAC Organics Subcommittee: Wrap Up From Today's Meeting**

Michelle Feldman [michelle@keepphiladelphiabeautiful.org]

**Sent:** Tuesday, April 21, 2015 2:44 PM**To:** Matthew Braden; Pennington, Melissa [pennington.melissa@epa.gov]; Giuranna, Mike [Giuranna.Mike@epa.gov]; Phil Bresee; Fern Gookin [fern@Revolutionrecovery.com]; Maurice Sampson [msampson@nicherecycling.com]; Paul Kohl; Laura Cassidy; mroles@cleanwater.org

Good Afternoon, All!

First, thanks so much to those who were able to make it to this morning's meeting!

As promised, I wanted to send quick wrap up notes (please feel free to chime in if you'd like to add anything)

Thanks again, everyone! See you all on Thursday!

Michelle

**Mission Statement**

The below is the final language for our mission statement:

*The mission of the SWRAC Organics Subcommittee is to assist with the development of a robust and sustainable infrastructure (including but not limited to systems, policies, procedures, process and assets) for organics recycling within Philadelphia. The Subcommittee will draw upon our combined knowledge and expertise to identify and consider current research, trends and technologies in order to support efforts that result in the best and highest use of organics waste for the city.*

**Leadership / Structure**

Chair: Matthew Braden

Meetings: Monthly, the Tuesday before each SWRAC meeting at 9:00am.

Additional Members of the Committee: **I will reach out to Marc Wilken about joining; Phil will reach out to Sarah Wu about possible ways to work with the Food Policy Advisory Council****Dates Through 2015 (note – I will be sending an outlook invite to all of those meetings):**

May 26th

June 23rd

July 21st

August 25th

September 22nd

October 20th

**\*\*November and December SWRAC meeting dates fall on Thanksgiving & Christmas, so we may want to leave those meeting dates for this subcommittee up for discussion****Actionable Goals**

- (1) Figuring out exactly how much food waste Philadelphia generates (working with the consultant hired for organics feasibility study)
- (2) Working with the consultant hired for organics feasibility study to provide context and history (both universal and Philadelphia specific) to the final report; this could include putting together a table of various types of organic waste and various methods for processing each
- (3) As appropriate (and down the line), assisting with vetting process for vendors

Michelle Feldman

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**MEETING SUMMARY:** City of Philadelphia Solid Waste & Recycling Advisory Committee (SWRAC)

**DATE:** May 28, 2015

**LOCATION:** City of Philadelphia Municipal Services Building

**ATTENDEES:**

SWRAC Members Present

Bob Anderson, ReCommunity Recycling  
Phil Bresee, Streets Department/Recycling Office  
Jack Embick, Environmental Law  
Michelle Feldman, Keep Philadelphia Beautiful  
Paul Kohl, Philadelphia Water Department  
Sal Iadonisi, U.S. Recycling  
Maurice M. Sampson II, Niche Recycling  
Vivian Van Story, Community Land Trust Corp.

SWRAC Members Absent

Katherine Gajewski, Mayor's Office of Sustainability  
Dan Garafolo, University of Pennsylvania  
Charles Raudenbush, Waste Management  
Debbie Zimmer, Dow Chemical  
Fern Gookin, Revolution Recovery

Others Present

Katie Bartollata, PennFuture  
Wayne Bowen, Pennsylvania Recycling Markets Center  
Michael Roles, Clean Water Action  
Laura Cassidy, Philadelphia Prison System  
Mike Giuranna, US EPA Region III  
Dylan Wells, Niche Recycling  
Kemry Heinold, Rehrig Pacific

City Staff/Consultants

Scott McGrath, Director of Environmental Services, Streets Dept.  
Jim Osborn, ARI  
Allison Sands, Recyclebank/Recycling Office  
Virginia Cain, Recyclebank/Recycling Office

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The meeting was called to order by co-chair Michelle Feldman and the minutes from the April 23<sup>rd</sup> meeting were approved by voice vote. Staffmembers Hadji Maloumian from the Office of Councilwoman Blondell Reynolds Brown, and Sean McMonagle from the Office of Councilman Mark Squilla were in attendance to take questions and help lead a discussion about anti-litter bills and the single-use bag ban bill that have recently been introduced in City Council. Bills 150198 and 150217 added new requirements related to the provision of containers for, and disposal of, rubbish, garbage and recycling materials, and clarified the obligations of certain businesses that sell food to provide

waste and recycling bins for use by their patrons. Bill 150373 proposed regulating the use of single-use bags and establishing a fee for consumer use of single-use bags when making purchases. SWRAC members were also reminded of the upcoming Greenworks Waste Session on June 1<sup>st</sup> to discuss policies for sustainability more broadly.

Jim Osborn of ARI presented on Solid Waste Disposal Alternative Technologies, including efforts to date by the Streets Department to incorporate these technologies. The presentation focused on Waste Management SpecFUEL™, anaerobic digestion, gasification, and enzymatic hydrolysis. Recent projects in North America were discussed, along with how these technologies could help improve waste diversion in Philadelphia.

Paul Kohl reported on the Organics Subcommittee meeting. Adam Hendricks from Philadelphia Water Department presented his research into food waste legislation at the state and municipal level to the group. He provided an overview of where such legislation has been passed or is under consideration, also noting that many had similar provisions addressing factors like distance from a food waste disposal facility, or amount of food waste generated. Melissa Pennington from the EPA also gave a presentation on BioBin permitting. Waste Management has applied for a permit for these self-contained dumpsters for organic decomposition that include air-circulating and filtering technology. Bin material must be further processed at a composting facility.

The meeting concluded with announcements and updates from Department staff and the co-chair.

**MEETING NOTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC),  
ORGANICS RECYCLING SUBCOMMITTEE

**DATE:** May 26, 2015

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**Food Waste Legislation Discussion:**

- Adam Hendricks from PWD presented research on food waste legislation at the state and municipal level.
- Five states have passed food waste disposal legislation: CA, CT, MA, RI, and VT. NJ has proposed legislation but it has not passed yet.
- At the state level, there are many common provisions within the legislations, such as a requirement that a food waste disposal facility existing within a certain radius for the legislation to take effect. These radii range from 15-25 miles.
- Generally they all require facilities generating between 1 and 2 tons/week of food waste to recycle that waste.
- There are also 7 municipalities that have passed food waste disposal legislation, including 2 in Canada. These are Austin, TX; New York City, NY; Portland, OR; San Francisco, CA; Seattle, WA; Toronto, ON; and Vancouver, BC.
- Only Austin and New York City have specific generators that the legislation applies to. The other cities are implementing residential organics recycling and working to enforce these requirements on commercial and industrial sources.
- In researching these programs, the most difficult property type to include in an organics recycling program are multi-family residential properties. This is largely due to space constraints and collection difficulties.
- A table outlining various provisions of these legislations is included with these notes.

**BioBin Permitting:**

- Waste Management applied for a permit for a self-contained organics collection system known as a BioBin. BioBins are essentially a self-contained dumpster for organic decomposition that includes air-circulating and filtering technology
- They applied under the existing state general permit WMGR025.
- Some of the provisions in that general permit create constraints for BioBin siting. Facilities cannot be sited within:
  - 900 feet of a school, park, or playground;
  - 300 feet of an occupied dwelling (without a waiver from property owner); or
  - 50 feet of a property line (without a waiver from property owner).
- The BioBins must be emptied within 6 weeks. The material from the BioBin must be further processed at a composting facility.
- There are no bonding requirements under the general permit.

## Notes from 6/23 SWRAC Organics Subcommittee Meeting

Michelle Feldman [michelle@keepphiladelphiabeautiful.org]

**Sent:** Tuesday, June 23, 2015 11:55 AM

**To:** Matthew Braden; Pennington, Melissa [pennington.melissa@epa.gov]; Giuranna, Mike [Giuranna.Mike@epa.gov]; Phil Bresee; Fern Gookin [fern@Revolutionrecovery.com]; Maurice Sampson [msampson@nicherecycling.com]; Paul Kohl; Laura Cassidy; mroles@cleanwater.org; Marc Wilken; Adam Hendricks

Hello, all!

Thanks for a great meeting this morning!

As promised, I wanted to send along a quick outline from our discussion. If there is anything you'd like to add or revise, just let me know!

And a friendly reminder that **our next meeting will take place on July 21st, same time and place (9:00am at the Streets Department).**

Thanks again everyone, and talk soon!  
Michelle

### Items for Potential Inclusion in Organics Feasibility Study

#### **Context & History:**

- What are comparable cities (NYC, Boston) currently doing, and how did they arrive there (what assets / challenges did they have, and do they have, compared to Philadelphia)?

#### **Audit: Physical Infrastructure and Legalities**

##### Physical Infrastructure

- Assessment of:
  - Locations and outlets
    - What are possible locations for composting sites, and what does the City own that could be used for composting purposes?
    - What activities are going on in Philadelphia already?
  - Types of composting possible
    - What "equipment" and technology is available? What might be feasible in Philadelphia?
  - Organics waste audit
  - What is the "low hanging fruit"? And how might we best phase in organics?

##### Legalities / Policy

- Assessment of:
  - Current permitting processes at various governmental levels
    - How do we account for and encourage small scale composting? "Master Composting" program like in Maryland, as a legal avenue?
  - Zoning / land bank opportunities and challenges for site acquisition and development (mapping of feasibility of locations not just from a physical standpoint, but from a legal / permitting standpoint)
  - Possible incentives
  - What structures would have to / could be created within City government depending on possible programmatic approaches



**MEETING MINUTES:** City of Philadelphia Solid Waste & Recycling Advisory Committee (SWRAC)

**DATE:** July 23, 2015

**LOCATION:** LevLane Advertising offices, Wannamaker Building

**ATTENDEES:**

SWRAC Members Present

Phil Bresee, Streets Department/Recycling Office  
Jack Embick, Environmental Law  
Michelle Feldman, Keep Philadelphia Beautiful  
Paul Kohl, Philadelphia Water Department  
Chuck Raudenbush, Waste Management  
Fern Gookin, Revolution Recovery  
Michael Roles, Clean Water Action  
Sal Iadonisi, U.S. Recycling  
Maurice M. Sampson II, Niche Recycling  
Vivian Van Story, Community Land Trust Corp.

SWRAC Members Absent

Bob Anderson, ReCommunity Recycling  
Katherine Gajewski, Mayor's Office of Sustainability  
Dan Garafolo, University of Pennsylvania  
Charles Raudenbush, Waste Management  
Debbie Zimmer, Dow Chemical

Others Present

Megan Garner, School District of Philadelphia  
Abby Rambo, South of South Neighborhood Association  
Katie Bartollata, Penn Future  
Laura Cassidy, Philadelphia Prison System  
Mike Giuranna, US EPA Region III  
Kemrey Heinold, Rehrig Pacific Company  
Mathew Braden, Councilman O'Brien's Office  
Samantha Wittchen, iSpring Consulting  
Tamika Davis, Philadelphia International Airport  
Benjamin Cromie, Philadelphia International Airport  
Danielle Bower, Philadelphia International Airport

City Staff/Consultants

Scott McGrath, Director of Environmental Services, Streets Dept.  
Jim Osborn, Alternative Resources, Inc.  
Jason Rossano, LevLane Advertising  
Eric Spector, LevLane Advertising  
Allison Sands, Recyclebank/Recycling Office

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**Call to order/introductions:**

The meeting was called to order by the co-chairs at approximately 1:40 p.m.

**Approval of Minutes:**

Action on outstanding meeting minutes was deferred.

**Old Business:**

Phil Bresee provided updates on legislative items in front of City Council. They include:

- **Bill No. 150610 - Food Waste Disposers (Councilman O'Brien)**. Bill would affect changes to building code to require food waste disposers in all new housing units. **Status:** Introduced 6/18/2015; referred to Committee on Licenses and Inspections.
- **Bill No. 150373 – Single-Use Bags (Councilman Squilla)**. Bill would assign \$.05 fee for designated single-use bags. **Status:** Introduced 4/23/2015; in Committee on Finance.
- **Recycling Ordinance Revision (no bill number)**. Bill to allow for Department of Streets to revise regulations related to City's original recycling ordinance 1251-A. **Status:** Has yet to be introduced by Councilwoman Bass.

Bresee indicated that Council will take up all three of these bills when it returns from recess in September.

**Review of June 1<sup>st</sup> Greenworks Session:**

Bresee reported that the Mayor's Office of Sustainability (MOS) held a visioning meeting on June 1<sup>st</sup> in which participants (included many SWRAC members) were given the opportunity to weigh in on possible policies and metrics going forward. MOS presented the forum as the first step in creating "Greenworks 2.0".

A summary of the meeting was distributed to SWRAC members.

**Organics Subcommittee Report:**

The Organics Subcommittee met on July 21<sup>st</sup>, and discussed the organics feasibility study with the project consultant, MSW Consultants. Meeting notes are attached.

**Facilitated Discussion on draft Chapter 5 of the SW Management Plan:**

Staff gave overview of facilitated discussions from 2014, and their incorporation into the current draft of chapter 5. Bresee and Osborn reported that chapter 5 will also be reorganized during the next round. DEP requirements can make the document difficult to follow.

Staff indicated that this will not be the last opportunity for SWRAC to provide input.

- Intro/background (P. Bresee)
- Overview of key elements (J. Osborn)
- Review of SWRAC input to-date
- Facilitated discussion and additional input (LevLane)

Presentation PowerPoint deck is attached.

**Recycling and Solid Waste Public Forum:**

Michelle Feldman addressed SWRAC about the need for a public participation strategy as part of the solid waste management plan submission process. She asked for a poll of attendees interested in participating and it included:

- Allison Sands
- Mike Roles
- Jason Rossano
- Maurice Sampson
- Vivian Van Story
- Chuck Raudenbush

**Other Announcements:**

Virginia Cain of the Recycling Office/Recyclebank will be joining PA DEP as their regional public affairs manager. She starts her new job at the beginning of August.

**Adjournment and Next Meeting:**

The meeting was adjourned at approximately 5:05 p.m. The next meeting will be on Thursday, August 27<sup>th</sup> at 3 p.m.

DRAFT

**MEETING NOTES:** SWRAC Organics Subcommittee

**DATE:** July 21, 2015

**LOCATION:** Streets Department Conference Room, MSB

**ATTENDEES:**

Phil Bresee  
Michelle Feldman  
Maurice Sampson  
Paul Kohl, PWD  
Terry Keene (MSW Consultants)  
Matt Braden  
Mike Giuranna

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**Meeting Goals and Objectives:**

Bresee and Michelle Feldman communicated to the subcommittee that the primary purpose of the meeting was for staff to introduce the organics feasibility study project consultant (Terry Keene of MSW Consultants). Project discussions flowed along these lines:

**Scope of the Study:**

- This will primarily be a technical study, rather than one that makes broad-based policy recommendations; specifically: issues regarding zoning / the land bank will not be within the scope of this study
- Among other topics, this study will: take the full life cycle of organics in to account (residuals, products, etc), examine the permitting structure, and look at various technological options (both aerobic and anaerobic)
- Organics processing options will be examined BEFORE an analysis of potential collection mechanisms (as opposed to the current outline of the study)
- The final study will be included as an appendix, and in the Executive Summary, in the Municipal Solid Waste Plan submitted to the DEP
- The topics raised by the subcommittee at the June meeting will be reviewed and encompassed within the study as necessary (with the exception of zoning / land bank concerns)

**Major Questions Raised:**

- Can issues not encompassed by this study be taken up by MOS's Food Policy Advisory Council? (It was noted that until the subcommittee has had some formal interaction with the MOS's Food Policy Advisory Council, it would be inappropriate to 'assign' them topics for discussion. It was suggested that the subcommittee collaborates with the FPAC as soon as possible.)

- What sector do we want to serve first / target, both in terms of collection and marketing of final products? (That said, this will not be a heavy marketing study)

**Study Timeline:**

The goal is to have this study completed by the end of 2015

**Old Business/Updates:**

Bresee indicated that the grant application for funding is currently being finalized for submission to PA DEP. The application package can be considered a formality for this style grant project (a "901 grant") and the City has received verbal sign-off from DEP.

**MEETING MINUTES:** City of Philadelphia Solid Waste & Recycling Advisory Committee (SWRAC)

**DATE:** August 27, 2015

**LOCATION:** City of Philadelphia Municipal Services Building

**ATTENDEES:**

SWRAC Members Present

Bob Anderson, ReCommunity Recycling  
Phil Bresee, Streets Department/Recycling Office  
Jack Embick, Environmental Law  
Michelle Feldman, Keep Philadelphia Beautiful  
Paul Kohl, Philadelphia Water Department  
Chuck Raudenbush, Waste Management  
Fern Gookin, Revolution Recovery  
Michael Roles, Clean Water Action  
Sal Iadonisi, U.S. Recycling  
Maurice M. Sampson II, Niche Recycling  
Vivian Van Story, Community Land Trust Corp.

Others Present

Andrew Sharp, Office of Sustainability  
Laura Cassidy, Philadelphia Prison System  
Mike Giuranna, US EPA Region III  
Tamika Davis, Philadelphia International Airport  
Sara King, University of Pennsylvania

Streets Dept. Staff/Consultants

Scott McGrath, Director of Environmental Services, Streets Dept.  
Maria Vamvakidou, Streets Dept.  
Nadira Kholb, Streets Dept/Recycling Office  
Jim Osborn, Alternative Resources, Inc.  
Jason Rossano, LevLane Advertising  
Allison Sands, Recyclebank/Recycling Office

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**Call to order/introductions:**

The meeting was called to order by the co-chairs at approximately 3:05 p.m.

**Approval of Minutes:**

Minutes from July 23<sup>rd</sup> were approved unanimously via voice vote.

**Organics Subcommittee Report:**

Paul Kohl reported on behalf of the organics subcommittee, which met on August 25<sup>th</sup>. The subcommittee discussed a possible framework for establishing goals and metrics related to organics recovery, and rolling them up into the SW Plan. There was discussion as well on how the City's organics plan may relate to any state-wide goals for recovering organics. Bresee commented that DEP

has not articulated a clear vision on how to best capture and recover organics, and that the feasibility study may help guide state policy.

The subcommittee also voted to support Council Bill No. 150610 (O'Brien), which would require that in-sink food disposers be required as part of issuance of building permits for new residential construction. Matt Braden from Councilman O'Brien's office said that a hearing date for this bill has been tentatively set for October 7<sup>th</sup>.

**Update on Solid Waste Management Plan Schedule:**

Jim Osborn of ARI presented the revised SW plan schedule. The new schedule envisions that a draft of the plan will be ready for PA DEP review in November, with January through March reserved for public participation. City Council will review the plan in May and June under the revised schedule.

Staff commented that DEP has been provided with draft chapters throughout the process, and so far has not expressed concern with the plan's progress.

**Review of July 23<sup>rd</sup> Chapter 5 Discussion:**

SWRAC members received LevLane's notes from the July 23<sup>rd</sup> facilitated discussion. Mr. Osborn also reported that he and his firm are finalizing the reorganization of chapter five of the plan, and incorporating SWRAC and stakeholder input from the July SWRAC meeting.

Phil Bresee shared that SWRAC's July 23<sup>rd</sup> recommendations were very similar to those expressed by stakeholders as part of the Greenworks Plan, Goal #7 discussion convened by the Office of Sustainability in June (many of the participants at this workshop are also SWRAC members).

Bresee indicated too that now that various policy and programmatic goals have been identified, SWRAC has to consider strategic goals or guiding principles.

Maurice Sampson raised the issue of "Zero Waste" and said that many jurisdictions around the U.S. have adopted Zero Waste goals. He further shared that the City's Food Policy Advisory Council (FPAC) has recommended that the City adopt a Zero-Waste goal.

Bresee acknowledged that Zero Waste goals have become more conventional, and that most of the top 10 largest cities in the U.S. have adopted them. He followed though that interpretation of what constitutes Zero Waste varies widely. For example, some jurisdictions don't consider Waste to Energy (WTE) as part of a zero-waste strategy. Other jurisdictions consider "Zero Landfill" to be one and the same with Zero-Waste. Bresee also explained that opinions differ on whether alternative technologies, similar to those presented by Jim Osborn at the May meeting, can be part of a true zero waste strategy.

There was also discussion on the practicality of a zero waste goal, and whether it would be achievable or aspirational. Bresee noted that many of the zero waste plans are actually designed to meet 90 percent reductions. He also pointed out that the rapid changes to our solid waste stream (i.e. less packaging, paper, etc.) make long-term goal setting even more difficult. Finally, he indicated that much of the work involved in creating zero-waste policy needs to be done "upstream", or before materials even become wastes, and ideally should be linked with statewide policies.

Bresee said that he would provide a summary of solid waste management and recycling goals from the top-10 U.S. cities (in terms of population) as well as some other selected jurisdictions at the next SWRAC meeting.

**Discussion of Solid Waste Plan Public Forum:**

Phil Bresee reported to SWRAC that based on further consideration, and discussion with department leadership, holding a special public forum(s) on solid waste issues and on the plan during the fall was not feasible due to limited resources and staffing. SWRAC co-chairs Michelle Feldman and Fern Gookin suggested holding extended and specific-issue oriented SWRAC meetings in lieu of a city-wide forum. Committee members agreed to regroup and discuss this issue further when the draft plan is closer to completion.

**Recycling Ordinance Discussion:**

This discussion was tabled.

**SWRAC September Meeting:**

The committee agreed unanimously to reschedule the September meeting because of the Papal visit. The meeting will be held on September 17<sup>th</sup>.

**Other Announcements:**

Sara King from UPenn said that due to a program change, they have a number of 95 gallon roll-out carts that they would be interested in making available or donating.

**Adjournment and Next Meeting:**

The meeting was adjourned at approximately 4:15 p.m. The next meeting will be on Thursday, September 17<sup>th</sup> at 3 p.m.

**MEETING NOTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC),  
ORGANICS RECYCLING SUBCOMMITTEE

**DATE:** August 25, 2015

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**Updates on Organics Feasibility Study:**

- The proposal for the study funding has been submitted to the PADEP. The PADEP is willing to fund 80% of the cost of the study, with Streets contributing the remaining 20%. The total cost is project to be around \$93,000.
- The study itself will kick off next month while waiting for official PADEP approval.
- Phil will report to the group on milestones.
- The feasibility study will not include a waste composition study.

**Summary of organics at SWRAC:**

- The 7/23 SWRAC meeting was light on the discussion of organics.
- A recommendation for the SWRAC regarding the role of organics is still needed from the subcommittee.
- The subcommittee needs to draft those recommendations and submit to the SWRAC.
- The following recommendations were discussed:
  - The City needs to start organics recycling;
  - The feasibility study should inform the mechanisms to start;
  - Commercial properties should be the first focus;
  - Recommendations should be kept broad to not limit the next 10 years; and
  - Additional discussion is needed to determine if a percentage goal of organics recycling can be included.

**Update on Council Bill No. 150610:**

- This bill would mandate the installation of food waste disposers in all newly constructed residential units.
- The subcommittee voted to support this bill.
- There is a hearing scheduled on the bill for early October (likely to be the 7<sup>th</sup>).

**MEETING SUMMARY:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** October 22, 2015

**LOCATION:** City of Philadelphia Municipal Services Building

**ATTENDEES:**

SWRAC Members

Michelle Feldman, Keep Philadelphia Beautiful (co-chair)  
Fern Gookin, Revolution Recovery (co-chair)  
Bob Anderson, ReCommunity Recycling  
Phil Bresee, Streets Department/Recycling Office  
Jack Embick, Environmental Law  
Paul Kohl, Philadelphia Water Department  
Sal Iadonisi, U.S. Recycling  
Andrew Sharp, Office of Sustainability (alternate for Katherine Gajewski)  
Maurice M. Sampson II, Niche Recycling  
Charles Raudenbush, Waste Management

Others Present

Laura Cassidy, Philadelphia Prison System  
Mike Giuranna, US EPA Region III  
Julian Goresko, University of Pennsylvania  
Ken Neborak, University of Pennsylvania  
Amy Cornelius, Concerned Citizen

City Staff/Consultants

Scott McGrath, Director of Environmental Services, Streets Dept.  
Maria Vamvakidou, Sanitation Program Administrator, Streets Dept.  
Jim Osborn, ARI  
Allison Sands, Recyclebank  
Erin Cartwright, Recyclebank

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The meeting was called to order by the SWRAC co-chairs and meeting minutes from the August 27<sup>th</sup> meeting were approved by voice vote. Paul Kohl gave the Organics Subcommittee report. He noted that Department staff had informed the subcommittee of start-up delays for the feasibility study due to consulting contract amendments and conforming. A discussion about goal-setting in the Solid Waste Plan followed, which will be shared with the full Committee as it continues to evolve. Linda Knapp of the Mayor's Food Policy Advisory Council presented to the group on their progress in identifying policies and best practices that would support the development of a food recovery infrastructure. She gave a comprehensive overview of their findings so far on how to develop an overall organics strategy in Philadelphia.

Robert Anderson and Phil Bresee gave presentations about national and global trends affecting recycling in Philadelphia and many other U.S. cities. Mr. Anderson focused on changes impacting the recycling commodity markets, such as the evolution of the recycling ton. He confirmed that trends

affecting MRF operations in Philadelphia, such as the light-weighting of aluminum cans and other materials, are being felt by processors across the country. Mr. Bresee provided an update on curbside recycling tonnages and MRF contract pricing. Notably, FY 2015 marked the first decrease in recycling tonnages for the City in ten years. In addition to the factors discussed in the previous presentation, the City has also changed its outreach focus to emphasize the quality of recyclables rather than participation. Additional macroeconomic market forces pushing the recovered materials market down were noted, although he stressed that the fiscal benefits of recycling for the City remain solid.

Mr. Bresee drew the Committee's attention to draft language for a revised recycling ordinance (City Council Bill No. 150748), which had been circulated to the Committee in advance of the meeting. The Committee had been kept informed of the legislative process and the Streets Department's proposed policy changes. After discussion, it was decided that the Committee would be given additional time to provide written feedback and reconvene via conference call on November 5<sup>th</sup> to consider the ordinance.

The SWRAC co-chairs requested that a work-group be formed to review and discuss the overall goal-setting and metrics that the updated solid waste plan should incorporate. Interested members should reach out to the co-chairs directly.

The meeting concluded with announcements and updates from Department staff and the co-chairs.

DRAFT

**MEETING NOTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC),  
ORGANICS RECYCLING SUBCOMMITTEE

**DATE:** October 20, 2015

**ATTENDEES:**

Michele Feldman, Keep Philadelphia Beautiful  
Phil Bresee, Streets Department/Recycling Office  
Adam Hendricks, Philadelphia Water Dept.  
Maurice Sampson, Niche Recycling  
Mike Giuranna, US EPA Region 3  
Laura Cassidy, Philadelphia Prisons System  
Tim Bennett, Bennett Composting, Inc.  
Fern Gookin, Revolution Recovery  
Marc Wilken, Philadelphia Parks and Recreation Dept.  
Linda Knapp, Philadelphia Food Policy Advisory Council

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The meeting was called to order at approximately 9:05 a.m.

**Staff provided update on status of feasibility study:**

- Start-up delays due to consulting contract amendments and conforming (MSW Consultants to sub under ARI)
- Still awaiting official notice to proceed from DEP (apparently coming next week)
- Staff will regroup with project team week of October 27th

**Committee discussion on overall solid waste management plan goals:**

- Zero waste & definitions and challenges
- Changing waste stream
- Timelines, sequencing
- To be discussed with SWRAC 10/22

**Presentation from Linda Knapp of Mayor's Food Policy Advisory Council:**

- Overview/background of FPAC
- Focus on policy, best practices, food recovery infrastructure
- Discussed backyard composting & community gardens as part of overall organics strategy
- Discussed organics recycling processing infrastructure development issues
- City buildings should lead by example
- FPAC recognizes that residential organics collection (at least initially) is difficult issue; believes private sector development must come first

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** November 5<sup>th</sup>, 2015

**MEETING HELD VIA CONFERENCE CALL**

**ATTENDEES:**

SWRAC Members Present

Michelle Feldman, Keep Philadelphia Beautiful  
Fern Gookin, Revolution Recovery  
Bob Anderson, ReCommunity Recycling  
Phil Bresee, Streets Department/Recycling Office  
Jack Embick, Environmental Law  
Paul Kohl, Philadelphia Water Department  
Maurice M. Sampson II, Niche Recycling  
Charles Raudenbush, Waste Management  
Vivian Van Story, Community Land Partnership  
Mike Roles, Clean Water Action  
Andrew Sharp, Mayor's Office of Sustainability (alternate for Katherine Gajewski)  
Megan Garner, Philadelphia School District (alternate for Francine Locke)  
Katie Edwards, Clean Air Council (alternate for Joe Minot)

Others Present

Shoshana Bricklin, Office of Councilwoman Cindy Bass  
Amy Cornelius, Concerned Citizen

City Staff/Consultants

Donald Carlton, Deputy Streets Commissioner  
Scott McGrath, Director of Environmental Services, Streets Dept.  
St. Martin Torrence, Director of Legislative Affairs, Streets Dept.  
Maria Vamvakidou, Program Administrator, Streets Dept., Sanitation Division  
Jim Osborn, ARI  
Terry Keene, MSW Consultants  
Allison Sands, Recyclebank  
Erin Cartwright, Recyclebank

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**Call to order/introductions:**

The meeting was called to order by SWRAC co-chair Michelle Feldman at approximately 2:05 p.m.

**Meeting Objectives:**

SWRAC co-chairs outlined meeting objective, which was to re-consider tabled motion from October 22<sup>nd</sup> SWRAC meeting regarding approval of the proposed new recycling ordinance, or Council Bill No. 150748 (Councilwoman Bass).

## Staff Presentation and Committee Discussion:

City of Philadelphia Recycling Director Bresee shared that Bill No. 150748 is scheduled to be heard by City Council's Streets & Services Committee on November 30<sup>th</sup>, beginning at 1 p.m.

Bresee provided a summary of the October 22<sup>nd</sup> SWRAC meeting, and then original recycling ordinance (1251-A) which was adopted in 1987. He noted it was adopted prior to PA Act 101 (1988), and was an early model for recycling ordinances passed around the U.S.

Bresee then referred to revised legislation documents related to the proposed ordinance, and the need to amend and repeal outdated parts of City Code, and referred to the two reformatted versions of the Council Bill delivered to SWRAC: One with repealed language being shown in strike-through vs. brackets; and another with all changes accepted (both are attached). Bresee began a page-turn review of the version with the repealed language shown in strike-through, starting with proposed changes to Section 10-717 of City Code.

Discussions ensued. Jack Embick posited that SWRAC objections were not related to the proposed *administrative* changes (Task Force, RAC and its authority, number of required MRFs, etc.), but were due to the bill's lack of defined goals and objectives. Mr. Embick also reiterated concerns over the process that the Department followed to solicit SWRAC input, and referenced situations in years past in which the RAC didn't believe the Department acted in a fully transparent manner.

Bresee explained the process for moving the Bill to this stage, and that crafting it involved coordination with multiple agencies. City staff also responded that they believe there are other more appropriate places for establishing and enumerating goals, including:

- Solid Waste Management Plan
- Greenworks
- A revised Executive Order from the Mayor

Co-chair Michelle Feldman reminded SWRAC that she and co-chair Fern Gookin issued a call for volunteers to serve on a goals development & policy workgroup.

Staff pointed out that PA Act 101 (1988) establishes goals, as well as the requirements for a SWRAC and a recycling director. Bresee further noted that it can be the City's Law Department's practice to eliminate redundancies in state and local laws.

Streets Deputy Commissioner Donald Carlton discussed the changes occurring to the MSW stream. The stream is "lighter" now, with less paper, a shift from glass and metal to plastics, and light-weighting of materials. These trends will make goal-setting more difficult, and they should therefore be addressed in more flexible documents, such as the SW plan, Greenworks, and executive orders.

Some SWRAC members further opined that by removing goals and objectives from the ordinance, the City's approach to recycling could be diluted by future administrations or departments. In addition, members expressed concerns over whether PA Act 101 could be repealed.

City staff shared that recycling's fiscal benefits to the city are understood by the Administration and Council, and that to move away from recycling would result in increased disposal fees, as well as loss of a significant amount of grant monies awarded by the state through Act 101. Staff also reported that the City would be at risk of

further state financial penalties for failure to comply with Act 101. Furthermore, Governor Wolf is a proponent of recycling and Act 101, and there have been no serious moves to repeal or defund it in the General Assembly.

Shoshana Bricklin, Legislative Director for Councilwoman Cindy Bass, explained aspects of the legislative process, and shared that the Bill can be amended in committee. She expressed willingness on behalf of Councilwoman Bass to review SWRAC's concerns and examine ways to address them through amendment.

Maurice Sampson offered that SWRAC and staff may be closer to mutual understanding than we think. Bresee pointed out that there is one more SWRAC meeting prior to the November 30<sup>th</sup> City Council meeting. It was suggested that SWRAC members be allowed to submit additional comments, for possible clarification and consideration, to synthesize comments and reflect the record. The SWRAC co-chairs specified that the comments need to be in writing, addressed to them, and sent by November 12<sup>th</sup>. A polling of SWRAC members found unanimous agreement with the approach.

The meeting was adjourned at approximately 3:05 p.m.

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** November 19<sup>th</sup>, 2015

**ATTENDEES:**

SWRAC Members Present

Michelle Feldman, Keep Philadelphia Beautiful  
Fern Gookin, Revolution Recovery  
Bob Anderson, ReCommunity Recycling  
Phil Bresee, Streets Department/Recycling Office  
Jack Embick, Environmental Law  
Paul Kohl, Philadelphia Water Department  
Maurice M. Sampson II, Niche Recycling  
Vivian Van Story, Community Land Partnership  
Sal Iadonisi, Newman Paper Co.  
Gerry Methven, Waste Management (alternate for Chuck Raudenbush)  
Andrew Sharp, Mayor's Office of Sustainability (alternate for Katherine Gajewski)  
Megan Garner, Philadelphia School District (alternate for Francine Locke)  
Katie Edwards, Clean Air Council (alternate for Joe Minot)

Others Present

Shoshana Bricklin, Office of Councilwoman Cindy Bass  
Mike Giuranna, US EPA  
Kemery Heinold, Rehrig Pacific Co.

City Staff/Consultants

Scott McGrath, Director of Environmental Services, Streets Dept.  
Jim Osborn, ARI  
Terry Keene, MSW Consultants  
Allison Sands, Recyclebank  
Erin Cartwright, Recyclebank

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**Call to order/introductions:** The meeting was called to order by SWRAC co-chair Michelle Feldman at approximately 3 p.m.

**Approval of Minutes:** The minutes from the November 5<sup>th</sup> meeting were approved via voice vote (Bresee move, Sharp 2<sup>nd</sup>).

**Organics Subcommittee Report:** This report was deferred until the next regular SWRAC meeting.

**Reconsideration of City Council Bill No. 150748:** The SWRAC co-chairs explained that an up or down vote from SWRAC on Council bill was the desired outcome from the meeting. The SWRAC co-chairs allotted 30 minutes for debate and final consideration.

City of Philadelphia Recycling Director Phil Bresee informed SWRAC that Bill No. 150748 is scheduled to be heard by City Council's Streets & Services Committee on November 30<sup>th</sup>, beginning at 1 p.m.

Bresee summarized previous SWRAC discussions on the ordinance, which occurred on October 22<sup>nd</sup> and November 5<sup>th</sup>. SWRAC members were also given until November 13<sup>th</sup> to provide additional comments, with written comments provided by Jack Embick, and comments from Vivian Van Story received via phone conversation. Mr. Embick's comments served as the primary basis for the discussion, with Katie Edwards and Maurice Sampson providing supporting arguments. The comments and responses are summarized and attached as part of Exhibit 1.

Near the end of the discussion, Shoshana Bricklin, Legislative Director for Councilwoman Cindy Bass reiterated that the Councilwoman was willing to amend the bill in committee based on comments from SWRAC. She also suggested that the timing is not right for bringing a bill with some of the strategic goals and content as advocated by some SWRAC members to City Council.

At close of the debate the co-chairs indicated that a roll-call vote would be taken to ensure members' votes are noted for the official record.

Phil Bresee offered a two-part motion (with second by Fern Gookin):

1. To approve staff's recommendation that the SWRAC support Council Bill No. 150748.
2. To authorize Streets Department and Council staff to modify certain whereas statements and to amend the bill accordingly in the Streets and Services Committee.

**The roll-call votes were cast accordingly:**

Feldman	Aye
Gookin	Aye
Anderson	Aye
Bresee	Aye
Edwards	No
Embick	No
Garner	Aye
Iadonisi	Aye
Kohl	Aye
Sampson	Abstain
Sharp	Aye
VanStory	Abstain
Methven	Abstain

The motion(s) carried with 8 ayes, 2 no's and 3 abstentions. This would be communicated to City Council as part of the Streets Department's testimony during the November 30<sup>th</sup> meeting of the Streets and Services Committee.

**Establishment of Solid Waste Plan Goals & Objectives Working Group:** SWRAC co-chair Michelle Feldman discussed the formation of a subcommittee to frame the goals and objectives for the 10-year solid waste management plan. Bresee noted that the draft plan is nearly complete, and that while SWRAC programmatic and policy thoughts and recommendations are incorporated, specific metrics and goals have yet to be fully discussed. The following SWRAC members/meeting attendees expressed an interest in serving on the subcommittee:

- Katie Edwards
- Jack Embick
- Maurice Sampson
- Andrew Sharp
- Michelle Feldman
- Phil Bresee
- Scott McGrath

**Informational Items and Announcements:**

- America Recycles Day – Activities from this year’s ARD included receipt of a resolution from City Council that recognized November 15<sup>th</sup> as ARD, and a distribution of recycling bins in City Council Offices.
- On November 13<sup>th</sup> the Streets Department officially opened its sixth sanitation convenience center in the Port Richmond neighborhood.

**Adjournment:** The meeting was adjourned at approximately 4:30 p.m.

## **Philadelphia SWRAC Goal-Setting Subcommittee: Meeting Notes from 12/15/2015**

### **Present:**

Michelle Feldman, Maurice Sampson, Jack Embick, Andrew Sharp, Phil Bresee, Scott McGrath

### **Overview:**

Staff provided review of current recycling and diversion goals, which consist of the State's 35 percent recycling diversion goal as established by PA Act 101 (1988), and the 70 percent diversion from landfill goal, set in the Philly Greenworks plan. Staff provided hand outs that detailed or summarized current and to-date progress, and also included charts that detail overall solid waste generation trends, MSW composition data, "evolving ton" data, and comparisons with other jurisdictions (meeting hand outs are attached).

The methodology used for compiling annual solid waste and recycling statistics was discussed, with staff explaining that overall and commercial disposal tonnages are reported through the state and that the Streets Department manages its own data for disposal and recycling. Staff noted though that recycling reporting from the private sector is more challenging, and that haulers, processors, and generators are not mandated to report to the City. Staff indicated that this is one of the things that the City hopes to fix through legislation in 2016.

There were also discussions on reported recycling rates vs. net recycling totals (i.e. minus residue and yield loss). Staff agreed to acknowledge these differences in subcommittee reports and the Solid Waste Management Plan.

### **Framework for Goal-Setting:**

Participants identified a number of considerations and objectives:

- Goals should be both aspirational and operationally pragmatic (i.e. realistic); realism will be critical in setting a timeline.
- Goals should also be both programmatic and quantitative: audit existing programming and assess strategic program gaps (all while being cognizant of necessary resources for success).
- Goals can help flush out and present resources needs; SWRAC can serve as advocates for resources.
- Since we won't have a new waste composition study completed within the time frame needed to set goals for inclusion in the Solid Waste Management Plan, our goals will have to be flexible.
- Goals should recognize the imperfect nature of our data (specifically from the commercial side) and include measures to address data quality issues.
- The Solid Waste Plan's planning horizon is 10 years (2016-2025) but goals can be set for a longer time frame.
- Goals should be structured incrementally with milestones.

### **Process / Timeline / Tasks:**

- The target for presentation and consideration by SWRAC is March 2016.
- By mid January Recycling Office will identify and summarize the varying interpretations of zero waste. The Recycling Office will also continue to research goals from other jurisdictions and how they might apply (or not) in Philadelphia.
- The Recycling Office will identify existing programs and their impacts, and will estimate impacts of potential new programs.
- The Recycling Office will contact DEP about a new waste composition study to be supported by grant funds.
- The Recycling Office and Office of Sustainability will ensure the incoming administration will be briefed on the plan and given opportunities to provide input.

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** January 26<sup>th</sup>, 2016

**ATTENDEES:**

SWRAC Members Present

Michelle Feldman, Keep Philadelphia Beautiful  
Fern Gookin, Revolution Recovery  
Bob Anderson, ReCommunity Recycling  
Phil Bresee, Streets Department/Recycling Office  
Jack Embick, Environmental Law  
Paul Kohl, Philadelphia Water Department  
Dennis Murphy, Philadelphia Commerce Department  
Maurice M. Sampson II, Niche Recycling  
Vivian Van Story, Community Land Partnership  
Sal Iadonisi, Newman Paper Co.

Others Present

Katie Bartolotta, PennFuture  
Don Lucy, Waste Management  
Mike Giuranna, US EPA  
Benjamin Cromie, Philadelphia International Airport  
Tamika Davis, Philadelphia International Airport  
Laura Cassidy, Philadelphia Prisons System

City Staff/Consultants

Scott McGrath, Director of Environmental Services, Streets Dept.  
Maria Vamvakidou, Streets – Sanitation Administration  
Marisa Lau, Streets - Recycling Office  
Allison Sands, Recycling Office/Recyclebank  
Erin Cartwright, Recycling Office/Recyclebank  
Jim Osborn, Alternative Resources, Inc.

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**Call to order/introductions:** The meeting was called to order by SWRAC co-chair Michelle Feldman at approximately 3 p.m.

**Approval of Minutes:** The minutes from the November 19<sup>th</sup> meeting were approved via voice vote (Anderson move, Bresee 2<sup>nd</sup>).

**Organics Subcommittee Report (Paul Kohl/Phil Bresee):**

- [PAUL'S REPORT]
- Bresee provided an update on the status of the organics feasibility study: The project consultant is refining organics estimates and projections from the City and identifying processors of yard waste and food waste/organics in the "Market Region". Once processors are identified, determinations will be made related to processing capacity, end markets, etc.

## Solid Waste Plan Goals & Objectives Subcommittee Report (Bresee):

- SW plan draft ~90% complete mainly needs word-smithing and data updating. **Also needs to identify and recommend goals.**
- Subcommittee has met twice (12/15 and 1/7).
- The first meeting included status report on Philly MSW trends (2014 completed) and existing goals achieved including the state's 35% recycling /diversion goal and the 70% landfill diversion goal as part of Greenworks.
- Subcommittee has discussed various reporting and methodologies used to calculate MSW generation, diversion, etc., and associated challenges.
- Subcommittee has performed literature reviews and discussions related to establishing goals and objectives, what other jurisdictions are targeting, etc. Staff continues to emphasize that the solid waste stream is changing rapidly, and that goals-setting has become exponentially more difficult.
- SW plan goals will not just need to be reflected in the SW plan (2016-2025 planning horizon), but also in the City's comprehensive plan (2035), Greenworks 2.0 and possibly as part of Kenney administration policy; syncing will be key.
- Overall challenge is to set something aspirational, but also something that is practical and achievable.
- The subcommittee discussed different interpretations of zero waste and whether waste-to-energy (WTE) technology should be considered. Staff reported that a number of high-profile corporate zero waste goals include WTE, while many cities and counties with zero waste goals include some versions of WTE or thermal conversion towards the goal. Subcommittee members and staff also discussed "sustainable materials management" (SMM) which is a newer concept that assesses the impact of resources throughout their lifecycles, not just at the "end of the pipe." US EPA and organizations such as GreenBlue have become advocates of SMM as opposed to zero waste.
- Staff and subcommittee members also discussed broader (i.e. state) policy initiatives and support that are necessary to effectively pursue zero waste, including product stewardship, deposit legislation, as well as more local actions such as green procurement and materials bans.
- An outcome of the subcommittee meetings has been recommendation for a new MSW characterization study. Staff received a positive response from DEP on application for another 901 grant to fund the project.
- Subcommittee consensus is that the City should adopt a Zero Waste plan with a goal of achieving it by 2035.
- *Staff continues to compile information or examples of zero waste goals from other jurisdictions and entities.*
- *Staff to provide analysis of MSW projections and ID necessary diversion tonnages to reach goals. Staff will also set incremental benchmarks.*

- *Staff will examine resource needs necessary to meet goals.*

**Presentation (Allison Sands): Residential Multi-Family Recycling project**

- Ms. Sands shared preliminary information related to an outreach project the Recycling Office is launching that will focus on areas with low diversion rates and with high concentrations of multi-family properties that receive service through the City (properties with between 2-6 dwelling units). Staff believes that renters and tenants in these properties are an underserved audience, and represent potential to capture more single-stream recyclables. The Recycling Office is planning to work and coordinate with landlords and property owners, as well as the tenants through community groups, HAPCO, canvassing, civic association meetings.

**Solid Waste Plan Update (Jim Osborn):**

- ARI and the Streets Department performed a page-turn review of the latest draft SW plan in early January. ARI is incorporating staff input and should have a revised draft in advance of the February meeting. Chapter 5 of the plan still needs refinement from content and organizational perspectives.

**Public Outreach Meetings (Michelle Feldman):**

- Ms. Feldman reminded the Committee that SWRAC will need to conduct a public outreach effort around the SW plan, and that previous discussions revolved around meetings themed by relevant topic (i.e. commercial recycling), open to stakeholders in those specific issue areas. SWRAC leadership will continue to work towards implementing this plan in consort with the rest of the Committee.

**Informational Items and Announcements:**

- *Green Schools Project* – Alison Sands reported that there are 16 Philadelphia schools participating in the project this year. The deadline to donate Recycling Rewards points is March 15 (see attached flyer).
- *GreenFutures Coordinated Education / Outreach* – Michelle Feldman reported that the School District is working with the Streets Department, Keep Philadelphia Beautiful, Recyclebank, iSpring and Community Marketing Concepts on coordinated student presentations focused on recycling. Schools will be targeted as they receive recycling dumpsters and bins as part of the larger GreenFutures sustainability management plan.
- *Council Bill #150748* – Bresee reported that the bill, better known as the recycling ordinance, was passed by the City Council Streets & Services Committee on November 30<sup>th</sup>; saw final passage on December 8<sup>th</sup>; and was signed into law by Mayor Nutter on December 23<sup>rd</sup>.
- *Fall Leaf Program results* – Bresee share results from the fall, 2015 leaves pickup program. See table below:

Fiscal Year	Tonnages
2011	1,054
2012	871
2013	881
2014	1,470
<b>2015</b>	<b>1,750</b>

- *Christmas Tree recycling program* – The announcement of results was deferred until next meeting.
- *Streets Department staff updates* – Bresee introduced Marisa Lau, who joined the Recycling Office on January 11<sup>th</sup>. Ms. Lau comes to the Department from a parks conservancy in Patterson Great Falls National Park in New Jersey. Ms. Lau has degrees from M.I.T. and Williams College in Massachusetts. Ms. Lau was hired as a city planner, and will eventually focus on commercial, multi-family and institutional recycling initiatives.

**Adjournment:** The meeting was adjourned at approximately 4 p.m.

## Philadelphia SWRAC Goal-Setting Subcommittee: Meeting Notes from 1/7/2016

### **Members Present:**

Michelle Feldman, Maurice Sampson, Jack Embick, Andrew Sharp, Mike Giuranna, Phil Bresee, Carlton Williams, Scott McGrath

### **Meeting Notes:**

The subcommittee approved the meeting notes from the December 15<sup>th</sup> meeting.

### **News & Updates:**

- Staff provided overview of materials shared with subcommittee, which included program data distributed at the December meeting, and media stories related to recycling and solid waste goals-setting.
- Staff communicated that PA DEP responded positively to the possibility of using Act 101 Section 901 grant monies for a new MSW characterization study.
- Staff will continue to identify goals and objectives from other jurisdictions, and share findings of interest with subcommittee.

### **Discussions:**

- *Recyclables distribution* – Staff provided a bar chart that detailed the distribution of recyclables tonnages towards the Act 101 recycling goal. The chart confirmed that while the overall (residential, commercial and C&D) recycling and diversion rate has hovered between 44 and 50 percent during the past five years, materials such as scrap metals and C&D make up the largest share of the diverted tons. This suggests that there is room to capture additional materials such as paper, cardboard and organics.
- *Zero Waste and Sustainable Materials Management* – The committee discussed different interpretations of zero waste and whether waste-to-energy (WTE) technology should be considered. Staff reported that a number of high-profile corporate zero waste goals include WTE, while many cities and counties with zero waste goals include some versions of WTE or thermal conversion towards the goal. Staff reported that they were still compiling information or examples of zero waste goals from other jurisdictions and entities.

Subcommittee members and staff also discussed “sustainable materials management” (SMM) which is a newer concept that assesses the impact of resources throughout their lifecycles, not just at the “end of the pipe.” US EPA and organizations such as GreenBlue have become advocates of SMM as opposed to zero waste.

Staff and subcommittee members also discussed broader (i.e. state) policy initiatives and support that are necessary to effectively pursue zero waste, including product stewardship, deposit legislation, as well as more local actions such as green procurement and materials bans.

Staff spoke about the increasingly unpredictable nature of the MSW stream and indicated that goal-setting, whether aspirational or pragmatic, has become much more difficult. Subcommittee members suggested that many other public policy goals have goals of zero, including the City’s “Vision Zero” goals, which focus on traffic and pedestrian. Members said that the public understands that such goals are aspirational and are not necessarily supposed to be taken literally.

**Other Comments:**

- Subcommittee members emphasized that the SWRAC should serve as an advocate for resources necessary to achieve goals.
- The Streets Department should use strategic goals and objectives to frame annual budget requests.
- Subcommittee members acknowledged that fiscal realities will greatly influence goal-setting and resource availability.
- Subcommittee members discussed the prevalence of C&D materials in the City's residential MSW stream, and debated possible actions.

**Recommendations:**

- The subcommittee recommended that distinctions be made between zero waste and zero landfill<sup>1</sup>. Subcommittee members recommended that a zero waste goal to be achieved by 2035 be established (which is consistent with the City's comprehensive plan).
- The goals and objectives, as well as certain milestones will also need to be sequenced with Greenworks 2.0, as well as potential Kenney Administration goals (4-8 years).
- The subcommittee recommended that the plan should evaluate the resources necessary to achieve goals, and establish incremental benchmarks and milestones.

**Next Meeting:**

The next subcommittee meeting will be held on January 21<sup>st</sup> at 2 p.m. in the Municipal Services Building.

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<sup>1</sup> The primary solid waste goal in the Greenworks plan was a 70 percent diversion from landfill.

**MEETING NOTES: City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC),  
ORGANICS RECYCLING SUBCOMMITTEE**

**DATE:** January 26, 2016

**ATTENDEES:**

Paul Kohl, PWD  
Adam Hendricks, PWD  
Phil Bresee, Streets Department/Recycling Office  
Mike Giuranna, US EPA Region 3  
Tim Bennett, Bennett Composting, Inc.  
Laura Cassidy, Philadelphia Prisons System  
Maurice Sampson, Niche Recycling  
Shante Mason, PWD  
Kendall Christiansen, Gaia Strategies  
Noah Christiansen, Gaia Strategies  
Nic Esposito, Philadelphia Parks and Recreation  
Marc Wilken, Philadelphia Parks and Recreation  
Fern Gookin, Revolution Recovery

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The meeting was called to order at approximately 9:15 a.m. Snow and travel related delays pushed meeting back. Introductions were made.

**Discussion on national food waste disposer usage from Kendall Christiansen:**

- Philadelphia was the first city to adopt a pilot program to study food waste disposers. It included 175 homes in 2 neighborhoods.
- Other than Philadelphia, five cities have conducted disposer pilot projects (Boston, Tacoma, Calgary, Chicago, and Milwaukee).
- Studies have similar results of a diversion rate of approximately 30-50% of total food waste stream in households with disposers.
- Food waste is in four categories – bones/hard wastes, liquids, soft wastes/leftovers, and food in packaging. Of these, food still in packaging is the hardest to get people to separate and put organics in disposers. Typically the whole package with food waste is put in the trash. If intended for organic recycling often not properly separated so that packaging gets to composter.
- Boston, MA is installing disposers in 3,000 units of public housing in the next 3 years. They operate and maintain 12,000 public housing units with additional 12,000 units operated under contract. The City of Boston will start a zero waste planning process in the spring (2016).
- Tacoma, WA has a WWTP that creates Class A bio-solids, with a high amount of local usage (TagGro). They are looking at purchase rebates and installation financing options for the promotion of FWD installation.
- LA is looking to start a pilot in the near future – 200 homes in one neighborhood. LA already has high installation rates (80% of homes have a disposer), so the focus will be more on increased use and upgrading units. The study will also analyze effects on wastewater treatment plant.
- Calgary is in construction on a \$50M composting facility for yard waste, food waste, and bio-solids. Single family (2017) green bin collection curbside. Consultation for multi-residence

- organics (green bin or FWD etc). FWD is under consideration, they have a 65 condo unit demonstration scale project.
- NYC has a pilot for curbside food waste pickup (~150k housing units in low density areas – NYC has 3.3 million housing units). They are having truck capacity issues (trucks are not full enough to be efficient) and having trouble finding places to take the wastes. They are struggling to figure out how disposers fit into their overall waste planning. A civic group (the Citizen's Budget Commission) is publishing a report within the next week looking at costs of truck collection vs. sewer transmission in NYC.
  - There are at least 2 additional cost studies, which seem to be similar to the one being done in NYC. The study was done by a Canadian engineering professor out of Western University that Kendall will try to share. The focal areas of study were London Ontario and the region of York both Canadian Cities.
  - Clarity on the new Philadelphia Law requiring installation of FWDs was discussed
    - This is for new residential construction only, but all residential construction, single family, to multiunit etc.
    - If one were interested in a heavy legislative hand then the law would need to be modified to include kitchen renovations. Much of our current residential activity is in the renovation market. It was explained to the group that the law was new construction only.
  - This led to discussions on overall current regulations and how they are enforced. That is, L&I, Department of Health, etc.
  - Maurice made the additional point that matching the disposer specs to the usage is a key to adoption. Gave an example of a Radian House (an 800 unit Penn housing facility) that put in cheaper disposers and now has increased waste disposal and maintenance costs.

**Phil Breese provided update on status of organic waste feasibility study:**

- Consultant work is underway – completed the first task, which was a situational analysis.
- Next task is to begin on a marketplace assessment, including processors, capacities, and market rates.
- Maurice brought up the point that the consultant should meet with the processors as a group to hear common issues and get a sense of what they see the future (w/o presence of regulators).
- Consultant will come to next month's meeting to provide more detailed update.

**Other meeting notes:**

- The Water Research Foundation is looking to petition their board to provide funding for additional research into the fate of food waste in the sewer system.
- The Delaware Valley Green Building Council is having a sustainability symposium in March. Kendall has submitted a panel proposal to discuss disposers further (<http://dvgbc.org/TriStateSS2016>).
- USEPA Region (III) just awarded some small grants (~\$10k) for food waste recycling – to West Chester, Northampton County, and Blair County.

**Next month's meeting is scheduled for February 23 at 9 AM.** It will again be held at PWD offices located at 1101 Market Street, but on the 3<sup>rd</sup> floor this time (Conference room 3A).

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** February 25<sup>th</sup>, 2016

**ATTENDEES:**

SWRAC Members Present

Michelle Feldman, Keep Philadelphia Beautiful  
Fern Gookin, Revolution Recovery  
Bob Anderson, ReCommunity Recycling  
Phil Bresee, Streets Department/Recycling Office  
Jack Embick, Environmental Law  
Emily Hill, Philadelphia Water Department (for Paul Kohl)  
Sal Iadonisi, Newman Paper Co.  
Don Lucy, Waste Management (for Chuck Raudenbush)  
Andrew Sharp, Office of Sustainability

Others Present

Christine Knapp, Director, Office of Sustainability

City Staff/Consultants

Scott McGrath, Director of Environmental Services, Streets Dept.  
Marisa Lau, Streets - Recycling Office  
Allison Sands, Recycling Office/Recyclebank  
Erin Cartwright, Recycling Office/Recyclebank  
Jim Osborn, Alternative Resources, Inc.

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**Call to order/introductions:** The meeting was called to order by SWRAC co-chair Michelle Feldman at approximately 3 p.m.

**Approval of Minutes:** The minutes from the January 26<sup>th</sup> meeting were approved via voice vote (Bresee move, Anderson 2<sup>nd</sup>).

**Organics Subcommittee Report (Emily Hill for Paul Kohl):**

- Terry Keene (MSW Consultants) discussed the status of the organics feasibility study and provided an updated work plan. He is working with Streets to finalize organics generation numbers. The next step is a market place assessment for organics disposal; at the meeting, Terry identified a draft list of facilities with where they hope to conduct surveys. The group provided feedback on the current list.
- Parks & Recreation discussed their potential for increasing their composting efforts. They continue to participate in the subcommittee and share pertinent information as it becomes available.

**Solid Waste Plan Goals & Objectives Subcommittee Report (Bresee):**

- The goals and objectives subcommittee met on February 22<sup>nd</sup>. Bresee said that the sustainability and environment section from the Kenney Administration's transition plan was shared with subcommittee members.
- The subcommittee has formed consensus around recommendation of a zero waste goal.
- Bresee distributed a table which summarizes subcommittee discussions and initial recommendations. He advised the SWRAC that a zero waste goal will not just require programmatic actions, but also policy actions at the local and state levels.
- Bresee reported that it is looking more likely that the goals subcommittee's recommendations may not be complete by the time the solid waste plan is ready for final review. He said that recommendations and deliberations will be incorporated into chapter 5, and in an appendix.

**Remarks by Christine Knapp, Director of the City of Philadelphia Office of Sustainability:** Christine Knapp provided a brief overview of the Office of Sustainability's next phase of work, principally updating the Nutter Administration's comprehensive Greenworks plan. She indicated that her office would be reaching out to SWRAC and SWRAC members as part of the discussion around recycling and waste reduction goal development.

**Solid Waste Plan Update (Jim Osborn):** Jim Osborn provided a verbal update on the status of the plan. A draft has been submitted to DEP for its review and the goals and recommendations that emerge from the goals subcommittee will need to be incorporated into chapter 5. Bresee passed around hard copies of the draft for committee perusal.

**Public Outreach Meetings (Michelle Feldman):** Ms. Feldman and Bresee indicated that the Recycling Office will task LevLane with developing and facilitating at least one public outreach meeting that meets the plan requirements. Ms. Feldman said SWRAC input will be welcome and that there will be a call for volunteers.

**Informational Items and Announcements:** Mr. Bresee, Mr. McGrath and Ms. Feldman updated the committee on the upcoming Block Captain Rally (3/19), Philly Spring Cleanup (4/9), and Keep Philadelphia Beautiful Earth Day cleanup at Hunting Park Recreation Center.

**Adjournment:** The meeting was adjourned at approximately 3:40 p.m.

## Philadelphia SWRAC Goal-Setting Subcommittee - 2/22/2016

### **Meeting summary:**

The subcommittee approved the meeting notes from the January 7<sup>th</sup> meeting. Bresee noted that the sustainability and environment section from the Kenney Administration's transition plan had been distributed to members.

The bulk of the discussion centered on the zero waste concept paper that Sampson prepared for the subcommittee. He described the zero waste definition and methodology used, as well as other key details of the paper, a draft of which will be made available to the subcommittee shortly. It is proposed that annual recovery targets be set for each sector with a goal of achieving zero waste by 2035, using 2015 as a base year. This would require a 4% annual increase in the MSW recycling rate each year, when calculated using the 2014 rate as a placeholder. Commercial and C&D recycling would require a 2.80% and 0.33% annual increase, respectively.

Bresee passed out a chart of the group's zero waste discussion to supplement this data analysis. The chart summarizes the range of recommendations considered by the subcommittee as part of a zero waste strategy for Philadelphia. Specific programmatic actions, as well as legislative and policy actions at the city, state, and federal level are included. He emphasized that any zero waste strategy will necessitate adopting some combination of actions, many of which can only be implemented through partnerships and joint programs with stakeholders in the public and private sector.

The subcommittee discussed the timeframe required to fully develop a strategy, and agreed that meeting the deadline for the final review of the solid waste plan seemed unlikely. The plan could reference the discussion to date instead, and the strategy included in a revised version of the document.

**MEETING NOTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC),  
ORGANICS RECYCLING SUBCOMMITTEE

**DATE:** February 23, 2016

**ATTENDEES:**

Paul Kohl, PWD  
Adam Hendricks, PWD  
Emily Hill, PWD  
Shante Mason, PWD  
Laura Cassidy, Philadelphia Prisons System  
Kendall Christiansen, Gaia Strategies  
Nic Esposito, Philadelphia Parks and Recreation  
Marisa Lau, Streets Department  
Tim Bennett, Bennett Composting, Inc.  
Mike Giuranna, US EPA Region 3  
Michelle Feldman, Keep Philadelphia Beautiful  
Fern Gookin, Revolution Recovery  
Phil Bresee, Streets Department/Recycling Office  
Terry Keene, MSW Consultants  
Marc Wilken, Philadelphia Parks and Recreation

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The meeting was called to order at approximately 9:00 a.m. It began with introductions and acceptance of last month's meeting notes with no changes, which will be forwarded to the large SWRAC.

**Additional FWD Information:**

- Paul began with a brief discussion of some calls he's received regarding the new FWD law.
  - NYC is reevaluating the use of FWD after a Citizen's Budget Commission report that showed high costs for food waste curbside collection (when compared to sink/FWD disposal). Multiple NYC agencies have contact PWD for our opinion.
  - Pittsburg also contacted PWD for feedback on the FWD law.

**Update on Streets Feasibility Study:**

- Terry Keene discussed the status of the study, providing an updated outline of the work plan.
- PADEP grant funding has been secured and grant is in final processing stages
- Streets and Terry are finalizing organics generation numbers and working out future projects based on estimated population and employee growth projections.
  - Organics (including food, woody debris, and soiled paper) is approximately 31% of the total waste stream.
  - This estimate is based on information from 2010 waste sorts for residential waste and comparative averages from similar municipalities for commercial waste.
  - This equates to approximately 400,000 tons/year of total compostable garbage, including:
    - 240,000 tons/year of food waste from all waste streams
    - 55,000 tons/year of food waste from the residential waste stream
    - 55,000 tons/year of yard/green waste from the residential waste stream

- 25,000 tons/year of soiled paper from the residential waste stream
- Terry asked PWD if we have information on projections of FWD installations, past or present. A number of 3,000/year is estimated with the new law, but that is not certain. PWD will try to find more information on this if it is available.
- The next step in the feasibility study is a marketplace assessment for organics disposal. Terry circulated a draft list of 27 facilities they are conducting surveys with, and asked the group for additional feedback on the list.
- Parks & Rec asked Terry if he had any sources on composting invasive and weed seeds that would help to limit the spread of those materials. Terry said that the state general permit GP-30 has time and temperature recommendations for composting weed seeds. Parks is also concerned about green waste from vacant brownfield sites – potential for heavy metal contamination from soil. They are not sure if there are opportunities for composting that waste, but they are not including in their facility as of now.
- Parks & Rec also mentioned that they are evaluating their ability to expand composting at their Fairmount Park facility to include food waste from within the “captive area,” which would include all facilities within park boundaries (art museum, Mann center, etc.). They are also interested in opportunities to expand organics recycling to rec centers and their summer foods programs.
- The surveys should be complete within the next month. It will potentially also include some market rates for organic recycling, if possible.
- Following the marketplace assessment, they will begin work on an assessment of processing options, including site visits and technological options. They will then conclude with research on collection opportunities for targeted market sectors.
- Draft report is anticipated in late summer, with a final version in the fall.

**Wrap Up Information:**

- PWD is currently researching food waste pre-processing technologies. Would like to present some findings at next month’s meeting.
- Terry Keene will forward specific data request to team regarding food waste capacity at PWD.

**Next month’s meeting is scheduled for March 22 at 9 AM.** It will be held at PWD offices located at 1101 Market Street, on the 3<sup>rd</sup> floor (Conference Room 3A).

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** April 28<sup>th</sup>, 2016

**ATTENDEES:**

SWRAC Members

Michelle Feldman, Keep Philadelphia Beautiful (co-chair)  
Fern Gookin, Revolution Recovery (co-chair)  
Bob Anderson, ReCommunity Recycling  
Jack Embick, Environmental Law  
Sal Iadonisi, U.S. Recycling  
Paul Kohl, Philadelphia Water Department  
Scott McGrath, Director of Environmental Services, Streets Dept.  
Charles Raudenbush, Waste Management  
Andrew Sharp, Office of Sustainability  
Vivian Van Story, Community Land Trust Corp.

Others Present

Nic Esposito, Parks and Recreation

City Staff/Consultants

Marisa Lau, Streets Dept./Recycling Office  
Bianca Reid, Streets Dept./Sanitation  
Jim Osborn, ARI  
Allison Sands, Recycling Office/Recyclebank  
Erin Cartwright, Recycling Office/Recyclebank

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**Call to order/introductions:**

The meeting was called to order by SWRAC co-chairs Michelle Feldman and Fern Gookin at approximately 3:10 p.m.

**Minutes:**

Meeting minutes from the February SWRAC meeting were approved by voice vote.

**Organics Subcommittee Report (Paul Kohl):**

- Adam Hendricks from PWD presented research into various pre-treatment technologies for food waste, focusing on seven options currently marketed in the U.S. A major finding is that the technology used should match the feedstock. Feedstocks with a higher level of contamination require advance processing, and thus a multi-step process would be needed such as those made by BTA and GE. A report will be given to the consultants for the Organics Feasibility Study.

- The discussion following this presentation focused on how to create the market in Philadelphia in order to attract one of these technologies to build a facility in the city. Drivers could be economic (either energy generated or end compost product) or legislative (an example being the food waste landfill ban currently before the NJ legislature). PWD distributed a map with a 35 mile radius from both of our plants with digesters to show the amount of NJ that would be covered if PWD accepted food waste.
- Paul Kohl then led a discussion on the engineering principles behind food waste co-digestion in anaerobic digesters. The main takeaway was that a large portion of the material would be destructed throughout the process due to the high water and volatile solids content of food waste, leaving only a small amount of material at the end of the process.
- The closing discussion centered on the organics feasibility study. It was decided that a list of questions for the consultant to ask would be generated by the organics subcommittee and then passed onto the consultants. The goal would be to help guide them to a better understanding of the potential market for food waste recycling.

#### **Solid Waste Management Plan Update (Jim Osborn):**

- The Department received word from PA DEP that the plan must be submitted this summer. The delay may be causing an unintended ripple effect at DEP on other timelines for decision-making. According to the new timeline, the draft plan will be sent to the SWRAC in mid-May. DEP will receive a courtesy copy at the same time. Comments from the SWRAC will be incorporated into the plan before it is released for a 90-day comment period.
- Mr. McGrath indicated that the goals technically only have to demonstrate how the City would meet or exceed the state 35% goal. The plan will indicate that the City will continue to maintain its current 45% to 50% rate and create a long term strategy for a zero waste goal. The goals subcommittee will be referenced as a part of this process which would also integrate the Organics Feasibility Study and organics subcommittee. This would be done as a Minor Plan Revision. Mr. Kohl asked if a more formal statement could be included in the plan. McGrath said that the Department will work with SWRAC on this issue.
- Ms. Van Story asked for more information about trash and recycling violations at multi-family properties. Mr. McGrath described this as an adjudication matter outside of the Department's purview. Fines are structured so that they increase over time if not paid. Mr. Kohl added that the Kenney administration is emphasizing litter prevention. Keep Philadelphia Beautiful and other organizations can connect citizens to resources to help address problems in their neighborhoods.

### **SWRAC: Potential focus areas moving forward (S. McGrath / M. Feldman / F. Gookin):**

- The committee discussed forming new subcommittees to focus on recycling ordinances and regulations. Updates to the ordinances are needed so that the City can regulate and keep track of private haulers through business licensing. These options are just some potential focus areas for SWRAC post-sustainability management plan. The committee may want to revisit notes from the visioning sessions for other ideas.
- Ms. Van Story asked whether changes to the regulations along with increasing or adopting different strategies for enforcement could be used to address litter and dumping. Ms. Feldman described in more detail the resources offered by her organization, Keep Philadelphia Beautiful, to help citizens take practical measures toward improving the physical and visual aspects of neighborhood environments.
- The Department will set up the next meeting date for the goals subcommittee in May.

### **Informational Items and Announcements (S. McGrath / M. Feldman / F. Gookin):**

- *Events* – Spring and summer household hazardous waste drop-off events will be held on 05/14, 06/11, and 07/14. The first event of the year was held on 04/23.
- *Recycling Director search* – The job announcement to replace Phil Bresee has been posted on job boards for recycling professionals in the Mid-Atlantic region. Mr. Embick asked if any of the applicants from the previous hiring process should be contacted, and if the Department would invite SWRAC members to be part of an application evaluation committee; Mr. McGrath will check on what the Department's plans are.
- *Philly Spring Clean-up* – The Philly Spring Clean-up had over 900 projects this year, a new record. The kick-off event was held in Strawberry Mansion, and included a basketball game with Mayor Kenney and Council President Darrell Clarke. The Department helped clean up the neighborhood for the event, supplementing residents' outstanding efforts throughout the year; the Department is now taking requests for assistance with other community-led clean-ups. Planning for next year's event will address the growing popularity of greening projects, the increased amount of supplies distributed to participants, and adding more corporate sponsorships.
- *LED project* – Mr. McGrath reported that the Sanitation Division has been working with the Sustainability Office which funded new LED lighting for two Fleet Shop Areas in Sanitation buildings as well as a Yard lighting project at State Road and Ashburner Street. The Sustainability Office is also funding two new LED Yard projects in the coming year. Their

lighting design consultant has been working closely with the Sanitation Engineers and Mechanics who are installing the new lighting.

In response to questions from the committee about truck purchases and snow removal, there are 120 trash trucks and 70 recycling trucks out on any given day; recycling is picked up first. Drivers go through training for snow removal operations, but may not be able to place snow with precision depending on the type of vehicle being used.

- *Residential Multi-Family Recycling project* – Ms. Sands gave an update on the project, which kicked off in March. Community Marketing Concepts completed canvassing of the first two pilot areas out of six total, and are now working in the third. SWEEP has been issuing warnings in these two areas, and will start ticketing in May. Community groups in these areas have also received presentations from the Recycling Office.
- *Prison systems composting program* – Ms. Gookin reported that Philadelphia Prisons System received funding from the Office of Sustainability to expand their composting program.
- *GreenFutures update* – Philadelphia School District is finalizing the release date of their sustainability plan. They will analyze the results of their recycling pilot over the summer and expand recycling to all district schools in the fall. The district has released a bid for a waste hauler.
- *Democratic National Convention* — Public works projects for the DNC in July include the installation of new models of Big Bellies and new wrappings on containers in targeted areas. PennDOT was responsible for paving the streets around City Hall this spring.
- *Sustainability Roundtables* –Mr. Sharp announced that the Office of Sustainability is holding a series of issue roundtables and community meetings as part of its outreach to update Greenworks, Philadelphia’s sustainability framework.

**Adjournment:** The meeting was adjourned at approximately 4:30 pm.

**MEETING NOTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC),  
ORGANICS RECYCLING SUBCOMMITTEE

**DATE:** April 26, 2016

**ATTENDEES:**

Adam Hendricks, PWD  
Emily Hill, PWD  
Maurice Sampson, Clean Water Action  
Kendall Christiansen, Gaia Strategies  
Nic Esposito, Philadelphia Parks and Recreation  
Mike Giuranna, US EPA Region 3  
Marisa Lau, Streets Department  
Fern Gookin, Revolution Recovery  
Michelle Feldman, Keep Philadelphia Beautiful  
Laura Cassidy, Philadelphia Prisons System  
Paul Kohl, PWD

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The meeting was called to order at approximately 9:00 a.m. It began with introductions.

**Food Waste Pretreatment Presentation:**

- Adam Hendricks from PWD provided a presentation on research into various pretreatment technologies for food waste.
- This presentation highlighted seven different technologies that are currently marketed to the US food waste recycling market. Many more technologies exist in Europe.
- Technologies discussed include those owned/developed by DODA, Waste Management, Anaergia, East Bay MUD, BTA, GE, and In-SinkErator.
- Examples were used whenever possible to discuss the output of these technologies, including:
  - DODA – Tacoma, WA
  - Waste Management – Los Angeles County, CA
  - East Bay MUD – Oakland, CA
  - DTA – Toronto, Canada
  - In-SinkErator – Render’s in Hamburg, PA
- A major finding with this research is that the technology used should match the feedstock. Feedstocks with a higher level of contamination require advance processing, and thus a multi-step process would be needed such as those made by BTA and GE.
- The discussion following this presentation focused on how to create the market in Philadelphia in order to attract one of these technologies to build a facility in Philadelphia. Drivers could be economic (either energy generated or end compost product) or legislative (food waste landfill bans).

**Update on NJ Legislation:**

- Paul Kohl provided an update on a New Jersey legislation that would require food waste separation and recycling if an appropriate facility is located within 35 miles.
- This legislation has been introduced before, and each time it makes it further through the legislative process.

- PWD distributed a map with a 35 mile radius from both of our plants with digesters to show the amount of NJ that would be covered if PWD accepted food waste.

**AD Basics:**

- Paul Kohl led a brief discussion on the engineering principles behind food waste co-digestion in anaerobic digesters.
- The main takeaway was that a large portion of the material would be destructed throughout the process due to the high water and volatile solids content of food waste, leaving only a small amount of material at the end of the process.

**Wrap Up Information:**

- The closing discussion centered on the organics feasibility study
- It was decided that a list of questions for the consultant to ask would be generated by the organics subcommittee and then passed onto the consultants. The goal would be to help guide them to a better understanding of the potential market for food waste recycling.

**Next month's meeting is scheduled for May 24<sup>th</sup> at 9 AM.** It will be held at PWD offices located at 1101 Market Street, on the 3<sup>rd</sup> floor (Conference Room 3A).

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** May 26<sup>th</sup>, 2016

**ATTENDEES:**

SWRAC Members

Michelle Feldman, Keep Philadelphia Beautiful (co-chair)  
Fern Gookin, Revolution Recovery (co-chair)  
Bob Anderson, ReCommunity Recycling  
Jack Embick, Environmental Law  
Megan Garner, Philadelphia School District (alternate for Francine Locke)  
Sal Iadonisi, U.S. Recycling  
Scott McGrath, Director of Environmental Services, Streets Dept.  
Denis Murphy, Commerce Department  
Charles Raudenbush, Waste Management

Others Present

Laura Cassidy, Philadelphia Prisons System  
Nic Esposito, Parks and Recreation  
Mike Giuranna, U.S. EPA Region 3

City Staff/Consultants

Marisa Lau, Streets Dept./Recycling Office  
Erin Cartwright, Recycling Office/Recyclebank  
Jim Osborn, ARI

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**Call to order/introductions:**

The meeting was called to order by SWRAC co-chairs Michelle Feldman and Fern Gookin at approximately 3:10 p.m.

**Minutes:**

Meeting minutes from the April SWRAC meeting were approved by voice vote. (Raudenbush move, Embick 2<sup>nd</sup>).

**Organics Subcommittee Report (Scott McGrath):**

- A new contract for the organics feasibility study needs to be put in place this summer, which may cause a lag in the report production.
- The subcommittee received the report prepared by PWD on food waste pre-processing technologies marketed in the US, and discussed its findings. The report will be made available to the SWRAC and organics feasibility study consultant. A brief discussion took place about the adoption of pre-processing technologies in Europe, which has been more

widespread than in the US. Reasons include a more regulatory-friendly environment in the EU, more homogenous waste streams, and different economic incentives due to dwindling landfill space.

- The consultant has also received questions from the subcommittee about potential opportunities for creating a market for regional food waste processing.

#### **Solid Waste Plan Update (Jim Osborn):**

- SWRAC received the link to download the draft plan on May 24<sup>th</sup>. Comments will be due to the Division by June 16<sup>th</sup>. Once the comments are received, the co-chairs and Division will review these together. Several paths forward will be identified, and presented at the next SWRAC meeting in June. The revised draft will be submitted to PA DEP on July 1 to start the required 90 day public comment period.
- An email describing how to give feedback on the plan will be sent after the meeting.

#### **Presentation on GreenFutures (Megan Garner):**

- Draft copies of the plan distributed to SWRAC differ slightly from the final version.
- GreenFutures is the School District's first sustainability plan, modeled on the City's GreenWorks plan. It resulted from nearly two years of gathering stakeholder input and demonstrates an integrated approach to sustainability and education. The document will be updated to track progress in implementation.
- The District has a formal recycling program in place at 42 schools that it will continue to expand. Comparing performance and calculating diversion rates has been challenging. To support this initiative, the District partnered with the City and other stakeholders to create consistent messaging about recycling, including a classroom presentation. In addition, follow up materials are being designed for teachers, including educational tools (cross-curricular activities for students at various levels) as well as resources / guides / and in-person trainings to help teachers work with their students to move towards environmental and civic action.
- McGrath noted that the District leadership is now clearly committed to growing sustainability in the schools.
- Garner responded to questions about composting. Two schools that currently have composting programs in place are Penn Alexander, made possible through a partnership with Bryn Mawr College, and Saul High School of Agricultural Sciences.

#### **Informational Items and Announcements (M. Feldman / E. Cartwright/ M. Lau):**

- *MRF Tour* – A tour of the ReCommunity plant has been arranged with the help of Bob Anderson for 8-10 SWRAC members on June 16<sup>th</sup> at 2:30 pm. Email Ms. Feldman to RSVP.

- *Recyclebank Green Schools Presentations* – Ms. Cartwright reported that participants in the Green Schools Program received their awards at a press conference last week held at the School District. District schools received over \$20,000 for sustainability and greening projects. In total, \$31,711.84 was awarded to a record 16 Philadelphia schools this year. Next week a check presentation to the participating charter schools will take place.
- *Multi-Family Project Update* – Ms. Lau reported that the Recycling Office will conduct outreach to commercial multifamily buildings located in the six neighborhoods where efforts are underway to increase diversion among the residential multi-family population. Property owners and managers of these buildings will receive a letter telling them how to file a commercial solid waste and recycling plan online. About 50 of the largest commercial multifamily buildings citywide (by number of units) will also receive a letter. SWEEP officers will provide additional outreach and enforcement to these buildings this summer.
- *KPB Microgrant Program + June 22<sup>nd</sup> Panel* – Ms. Feldman noted that her organization’s Microgrant Program for litter abatement projects is accepting applications from community nonprofits through tomorrow. The number of grants awarded will increase to four this year; projects will be funded at higher levels than last year. KPB is partnering with Young Involved Philadelphia to host a *Cleaning+Greening* panel this month that will connect attendees with resources to help improve their blocks.
- *Events* –The next household hazardous waste drop-off will be on June 11<sup>th</sup> at the Northwest Transfer station.
- *E-waste legislation* – Mr. Raudenbush noted that the PROP board is working to identify a better alternative to the current legislation being proposed, which many believe will have a minimal impact on improving the state of recycling e-waste in PA.

**Adjournment:** The meeting was adjourned at approximately 4:10 pm.

**MEETING NOTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC),  
ORGANICS RECYCLING SUBCOMMITTEE

**DATE:** May 24, 2016

**ATTENDEES:**

Scott McGrath, Streets Department  
Carlton Williams, Streets Department  
Laura Cassidy, Philadelphia Prisons System  
Nic Esposito, Philadelphia Parks and Recreation  
Tim Bennett, Bennett Composting  
Mike Giuranna, US EPA Region 3  
Marisa Lau, Streets Department  
Emily Hill, PWD  
Adam Hendricks, PWD  
Paul Kohl, PWD

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The meeting was called to order at approximately 9:00 a.m.

**Food Waste Pretreatment Report:**

- Adam Hendricks from PWD gave an overview of the report on food waste pre-processing technology. This report is included with these minutes. This report is based on last month's presentation, which highlighted different technologies that are currently marketed to the US food waste recycling market.
- Paul described how the cost of each technology is proportional to the quality of its output, as the multi-step processing units have the least amount of downstream contamination, while the less expensive ones allow some contamination to pass into digesters.
- It was noted that EBMUD was the only utility to actively engage in the MSW market directly - all other wastewater utilities use an intermediary. East Bay MUD handles a high volume of material and not all of it can be effectively digested. If the waste stream is too dilute, they feed it into the front of the plant. Much of their income to support this operation is from tipping fees not electricity generation.
- It was noted that many of the current middle of the road technologies are being demonstrated in transfer stations, so that reject material can simply be move to the other side of the floor and sent to landfill.
- The higher end facilities process all material sent to them resulting in high levels of organics capture and high diversion rates. Yet these facilities cost more to build and operate. The committee asked for more information about Disco Road regarding the mass flow rates of the various materials processed within their facility. They also asked about where and how they are reject materials are ultimately disposed of and information regarding the GHG footprint of the facility.
- In addition to the committee asked if BioBins could be added to the list of pretreatment technology investigated. Although initially assumed to be odor controlled storage devices these can be viewed as pre-composting bins.
- This report will be distributed to the organics feasibility study consultant (MSW) for use in their report.

**Solid Waste Management Plan:**

- Scott McGrath provided an update on the solid waste management plan for Act 101. He will be sending around a link to the current draft version of the plan before the end of the week via Dropbox.
- At the Thursday SWRAC meeting, he will discuss the schedule for adoption of the draft, including a public comment period.
- Over the summer, the report will be reviewed and comments will be accepted. PADEP will have a preliminary review of the document as well.
- The report will include a discussion of both zero waste goals and organics recycling; however, the plan will not provide specific recommendations for either. The plan should be viewed more as a general guided with discussion of these issues for the future.
- Streets wants to bring in the Health Department to help with organics permitting and regulation.

**Organics Feasibility Study:**

- Scott also has a call tomorrow (Wednesday 5/25/2016) with the organics sub consultant to catch up.
- They need a new contract in place over the summer to continue work – may cause a lag in report production.
- Paul and Adam drafted questions from the committee for the consultant and sent them over last week, based on subcommittee input. These questions focused on what is needed to create a market rather than the market as it exists today. The questions will also be appended to this report.

**AD Basics:**

- Paul Kohl updated last month's discussion on the engineering principles behind food waste co-digestion in anaerobic digesters.
- Paul showed that after digesting one ton of food waste, approximately 245 pounds of material are left. Schematic of calculations appended to notes.

**Next month's meeting is scheduled for June 14<sup>th</sup>, from 9-10 AM.** It will be held at PWD offices located at 1101 Market Street, on the 3<sup>rd</sup> floor (Conference Room 3A).

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** June 23, 2016

**ATTENDEES:**

SWRAC Members

Michelle Feldman, Keep Philadelphia Beautiful (co-chair)  
Fern Gookin, Revolution Recovery (co-chair)  
Bob Anderson, ReCommunity Recycling  
Jack Embick, Environmental Law  
Scott McGrath, Director of Environmental Services, Streets Dept.  
Denis Murphy, Commerce Department  
Charles Raudenbush, Waste Management  
Andrew Sharp, Office of Sustainability  
Maurice Sampson, Niche Recycling  
Vivian Van Story, Community Land Trust Corp.

Others Present

Adam Hendricks, Philadelphia Water Dept.  
Laura Cassidy, Philadelphia Prisons System  
Sara King, University of Pennsylvania

City Staff/Consultants

Tamyra Harris, Streets Dept.  
Maria Vamvakidou, Streets Dept.  
Marisa Lau, Streets Dept./Recycling Office  
Allison Sands, Recycling Office/Recyclebank  
Jim Osborn, ARI

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**Call to order/introductions:**

The meeting was called to order by SWRAC co-chairs Michelle Feldman and Fern Gookin at approximately 3:10 p.m.

**Minutes:**

Meeting minutes from the May SWRAC meeting were approved by voice vote. Meeting summaries from the Oct 2015 and May 2015 SWARC meetings were also approved.

**Organics Subcommittee Report (Adam Hendricks):**

- A summary describing food waste legislation action was provided to the subcommittee. Updates were given on a new proposed bill in the state of Maine that would require food waste recycling, and a new reintroduced bill in the state of New Jersey.

- Legislation at the city level has not progressed as much as state legislation over the last year. However, NYC has, by regulation, shortened the list of regulated generators who must comply with the food waste legislation. They have the option to continually revise these regulations based on perceived capacity and cost assessments. A capacity assessment for NYC was briefly discussed, with a link to the study to be included in subcommittee minutes.
- Mr. Kohl and Mr. Hendricks then provided updates and responded to questions regarding Toronto's Disco Road facility. These addressed processing capacity, alternative energy products, and drivers for the technological investment.
- Next subcommittee meeting is scheduled for August 23.

#### **Commodities Update (Scott McGrath):**

- The price that the City pays to process and market the recyclables it collects decreased from \$30 to \$23 per ton since the previous month, indicating that commodities prices may be improving. Paper mills are purchasing material in preparation for the holiday season, giving a boost to that market.
- Members discussed the possible implications of the soda tax for recycling. A drop in consumer purchasing could have an impact on the recycling stream. Mr. Sharp reported that the Sustainability Office has not researched this yet. Meanwhile, the recycling stream is continuing to evolve consistent with national trends. The recycling sort from spring 2016 confirmed that amounts of paper and glass are continuing to decrease, while plastics and cardboard are increasing. However, these changes were not as dramatic as in the last study.

#### **Solid Waste Plan Update (S. McGrath/J. Osborn):**

- Written comments from the SWRAC have been received. Comments focused on technical corrections about the City's biosolids management, its anaerobic digestion facilities, and Waste Management's SpecFUEL waste processing facility. A revised draft of the plan will be released in early July.
- Additional comments on the draft plan were given at the meeting.
  - Mr. Embick was concerned about the lack of mention of metrics and goals. He noted that this subcommittee has not met since February, and little progress has been made since then towards setting a zero waste goal. A more robust description of what we intend to do is needed in the plan.
  - Mr. Sampson noted that many references are made to the new sustainability plan and asked for an update on its timeline for completion. He also expressed concern for how the organics feasibility study is represented, then asked for clarification about the objectives of the study and how results will guide the development of a zero waste strategy. Lastly, he suggested that descriptions of the commercial waste stream failed to capture the inherent difficulty of tracking what are essentially multiple waste streams that would be best examined sector-by-sector.

- Mr. McGrath noted that several areas in the plan could be strengthened by:
  - Additional language of what we aim to achieve by setting a solid waste goal for the City, clarifying our intention to use the results of the organics feasibility study to shape a pragmatic strategy to get to zero waste;
  - Indicating that the organics feasibility study will identify barriers to the development of an organics market in Philadelphia, and how these can be overcome, and;
  - Acknowledging a lack of available information about the commercial waste sector.
- Mr. McGrath added that the Department received preliminary approval from PA DEP to apply for a grant to conduct a new waste characterization study, which will support efforts to understand barriers to organics recovery. The application will be submitted in coming weeks.
- SWRAC may want to convene a stakeholder discussion about a coordinated approach to tracking commercial waste.
- Mr. Sharp confirmed that the City's new sustainability plan is due for release in fall 2016. It will incorporate stakeholder feedback received in engagement sessions that recently concluded. Staff has been using this feedback as a basis for discussions with City departments. In addition, staff will take SWRAC and subcommittee discussions into account. Sustainability topics to be included have been identified, and will encompass long-range planning issues requiring systemic changes. The ways in which other cities are measuring their progress towards sustainability have been reviewed, and several possibilities for metrics to use are being considered.

#### **Informational Items and Announcements:**

- *No July Meeting* – see everyone in August!
- *Recycling Coordinator Search* – Mr. McGrath announced that the Department has identified five prospective candidates who will be invited to interview in coming weeks. Andrew Sharp will be the SWRAC representative on the interview panel.
- *Legislative e-Waste Recycling Update* – Mr. Raudenbush gave an overview of PROP's advocacy work to address the problems created by the CDRA (Act 108 of 2010). PROP opposes amendment HB 1900 because it will not ensure a sustainable solution for the PA e-waste recycling industry. The rising cost of recycling electronics is making it harder for everyone—from consumers, to counties, to haulers and processors—to fulfill the requirements of CDRA. A comprehensive solution is desperately needed, but HB 1900 does not go far enough. PROP and other organizations calling for legislators to rethink the amendment have come up with an alternative proposal that has broad support. It will be introduced in the legislature shortly. For those interested in supporting PROP's efforts, this website created by Keep Pennsylvania Beautiful has sample language to use, including a draft letter: <http://ewastepa.org/contact-your-legislator/>

- Mr. McGrath noted that consumers want to update to the newest technology for TVs, especially, and the EPA has calculated that the amount of electronics in the waste stream will not drop off for at least a decade. The City collected 1.3 million pounds of e-waste IN FY16. Mr. Sampson and Ms. Feldman agreed to explore the possibility of having someone present on this topic at a future SWRAC meeting.
  
- *GreenFutures Recycling Presentations* – Ms. Feldman announced that initial results of the School District’s recycling outreach will be released in August. The School District, Recyclebank and Keep Philadelphia Beautiful have new data available on the student population reached through recycling presentations at schools participating in the pilot. The partners will use the data to brainstorm and look to implement ways to improve the student presentations, in order to make sure that teachers are equipped to help students take what they learned and apply it towards environmental and civic action when recycling is expanded to all schools this fall. Ms. Sands also noted that the School District recently awarded a contract to the hauler J.P. Mascaro & Sons.
  
- *KPB Microgrant Awardees* – Ms. Feldman announced that the following four community-based organizations will receive seed funding for litter prevention and abatement efforts through Keep Philadelphia Beautiful's microgrant program: Chinatown Community Development Corporation, Hunting Park United, New Kensington CDC and the Passyunk Square Civic Association.
  
- *Other announcements* – Mr. Sharp had two items of interest. Parks and Recreation will be expanding their recycling pilot program. They have been offering recycling, primarily indoors, at a few locations, and now plan to roll out recycling at their facilities citywide. The Office of Sustainability has purchased recycling bins to support this initiative. Also, Councilman Squilla is holding a hearing on the feasibility of adding polystyrene to the City’s recycling stream this fall. This is likely due to efforts made by DART to head off any citywide ban.

**Adjournment:** The meeting was adjourned at approximately 4:15 pm.

**MEETING NOTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC),  
ORGANICS RECYCLING SUBCOMMITTEE

**DATE:** June 14, 2016

**INVITEES:**

Adam Hendricks, PWD  
Emily Hill, PWD  
Paul Kohl, PWD  
Scott McGrath, Streets  
Marisa Lau, Streets  
Mike Giuranna, US EPA Region 3  
Fern Gookin, Revolution Recovery  
Michelle Feldman, Keep Philadelphia Beautiful

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The meeting was called to order at approximately 9:00 a.m.

**Solid Waste Management Plan:**

- The Solid Waste Management Plan has been sent around to SWRAC members for review and comment. The plan itself is expected to go out for public review and comment starting in early July. The plan itself has a limited discussion of organic recycling, with the potential to be amended following the results of the organics feasibility study.
- Currently the contract for the plan and the organics feasibility study are in transition. The existing contract is expiring and a new one is taking place. The feasibility study will be separated out from the plan.
- MSW consultants should be sending some of the initial draft sections of the feasibility study to Streets soon. Scott will forward them to the group upon receipt.
- MSW is interested in having a site visit at the Fairmount Park composting facility. Terry would like to set this up as soon as possible.

**Legislative Update:**

- Adam circulated an updated table of food waste disposal legislation. A digital copy of this table is also included with these notes.
- This table included a new proposed bill in the state of Maine that would require food waste recycling.
- It also included a new reintroduced bill in the state of New Jersey.
- An update on the NYC legislation was discussed too. NYC has, by regulation, shortened the list of regulated generators who must comply with the food waste legislation. They have the option to continually revise these regulations based on perceived capacity and cost assessments.
- A capacity assessment for NYC was briefly discussed. That assessment was completed by a third party, but is available digitally at the following location:  
[http://thecorr.org/Regional\\_Food\\_Waste\\_Report\\_Global\\_Green\\_USA.pdf](http://thecorr.org/Regional_Food_Waste_Report_Global_Green_USA.pdf)

**Toronto's organic diversion process:**

- Paul and Adam provided updates and a response to last month's questions regarding Toronto/The Disco Road facility.

- Toronto produces ~130,000 tonnes/yr of organics, expanding the program to multi-residential buildings would increase the total to ~160,000 tonnes/yr
- Currently the Disco Road plant accepts 75,000 tonnes/yr and the Dufferin plant accepts 25,000 tonnes/yr. The Dufferin plant is about to expand to 55,000 tonnes/yr under a contract with Anaergia.
- The Disco Road facility produces 16,650 tonnes/yr of inorganic waste – 15,000 tonnes of floaters, 900 tonnes of sinkers, and 750 tonnes of grit.
- AECOM (current operator) charges the City of Toronto \$82 for the 55,000 tonnes and \$45/tonne for the remaining 20,000.
- They currently only use a small amount of gas for heat onsite, and flare the remaining. They have been back and forth for years between using the gas as a fuel or generating electricity. They are moving forward with designs for electricity generator, but are still entertaining fuel options.
- One of the drivers for the investment from Toronto is the 5-hour round trip to the nearest landfill.

**Other business:**

- As there is no SWRAC meeting in July, there will be no organics subcommittee meeting. We will meet again in August.
- Scott made an additional point about the potential for the city to pursue a CNG project with PGW. Federal grant money is available, and trash trucks seem to be a prime candidate for CNG conversion.

**Next month's meeting is tentatively scheduled for August 23<sup>rd</sup>, from 9-10 AM.** It will be held at PWD offices located at 1101 Market Street, on the 3<sup>rd</sup> floor (Conference Room 3A).

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** August 25, 2016

**ATTENDEES:**

SWRAC Members

Fern Gookin, Revolution Recovery (co-chair)  
Bob Anderson, ReCommunity Recycling  
Scott McGrath, Director of Environmental Services, Streets Dept.  
Emily G. Hill, Philadelphia Water Department  
Sal Iadonisi, U.S. Recycling  
Paul Kohl, Philadelphia Water Department  
Denis Murphy, Commerce Department  
Charles Raudenbush, Waste Management  
Maurice Sampson, Niche Recycling  
Vivian Van Story, Community Land Trust Corp.

Others Present

Laura Cassidy, Philadelphia Prisons System  
Nicholas Esposito, Philadelphia Parks and Recreation

City Staff/Consultants

Marisa Lau, Streets Dept./Recycling Office  
Allison Sands, Recycling Office/Recyclebank  
Erin Cartwright, Recycling Office/Recyclebank

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**Call to order/introductions:**

The meeting was called to order by SWRAC co-chair Fern Gookin at approximately 3:15 p.m.

**Minutes:**

Meeting minutes from the June SWRAC meeting were approved by voice vote (Raudenbush move, Anderson 2<sup>nd</sup>).

**Organics Subcommittee Report (Paul Kohl):**

- Mr. McGrath gave an update to the subcommittee. He distributed the 6-month report on the Organics Feasibility Study prepared for DEP, showing that the consultants are now working on a marketplace assessment (task 2).
- Consultants for this study and the Act 101 plan will be back under contract soon. As part of those new contracts, the consultants will also initiate a waste characterization study of the residential stream, and a small, focused study with a waste sort of one commercial sector.

McGrath suggested the hotel sector and asked for additional suggestions. Streets has received preliminary approval from PA DEP to apply for grants to support these studies.

- Regarding the regulatory environment, the re-authorization of the \$2/ton fee on waste disposal may represent an opportunity to seek changes to the PA waste disposal planning process.
- With the help of the SWRAC, Streets will work on revising several regulations that relate to the prevention of food waste disposal.
- Next, Mr. Kohl reported to the subcommittee that he had met with PWD's commissioner (D. McCarty) to discuss PWD digesting food waste. The meeting was positive but no immediate decisions were made.
- PWD's operations division still needs to confirm the initial capacity assessment to determine how much food waste the department could take and how to phase it in.
- PWD also has an RFI in internal review for the pre-processing of food waste. PWD has made it clear that unlike East Bay MUD, it is not interested in receiving waste streams directly. The concept of concession contracting was discussed. Streets used this method to move forward with Big Belly advertising.
- Cost of food waste disposal, landfill tipping fees, composting and other processing information was obtained by consultant as they conducted the regional survey. This information will be shared with PWD. At the meeting it was presented that the fees varied widely and even the basis of the cost was not uniform. Some fees based on volume (cubic yards), some on weight (tons) and some on an algorithm of frequency of pick up.
- Regarding the possible selection of a targeted first market, the committee suggested two things.
- Any food handling (processing) facility will have 20% to 40% of its process stream as a waste stream. This is a big market.
- Specifically, grocery stores are a big and high quality market, and should be pursued first. The targeting of such a high quality stream is in the interest of the whole organic recycling industry. Even though this supply would make excellent soil via composting, the overall capacity to process food waste is currently small enough that any improvement in the "receiving" market would increase the development of collection market. This would lead to more competition.
- Emily Hill from PWD briefly introduced PWD's Utility Wide Strategic Energy Plan to the subcommittee. This plan sets goals for greenhouse gas reductions and renewable energy generation. In order to meet these goals, PWD would need to produce more biogas, which will require additional high strength wastes (ideally organics) to be processed by PWD.

#### **Update on Goals Subcommittee and Solid Waste Plan (Scott McGrath):**

- Streets has prepared a public notice. The draft plan for public comment will be available at five libraries and at philadelphiastreet.com during the 90-day public comment period

starting in early September; the public will be invited to comment on the plan at the SWRAC meeting on Sept 22.

- Mr. Anderson suggested that a regional list of recycling facilities be added to the plan.
- The framework for Greenworks has taken shape, which will help guide the formulation of a zero waste strategy by the Goals subcommittee. PRO will contact subcommittee members about meeting in September. Feedback received during the public comment period can be used by the SWRAC to develop goals and targets for the plan.
- SWRAC can convene a new subcommittee to help rewrite related regulations and ordinances.
  - Ordinances address a range of issues that are all important to a sustainable future and enhanced quality of life in Philadelphia; these will need to be worked on simultaneously for the most part.

#### **Recycled Artist in Residency presentation (Fern Gookin):**

- Presentation included an overview of RAIR (Recycled Artist in Residency), which is a non-profit housed within Revolution Recovery. RAIR is an art and industry collaboration that interrupts the waste stream to promote and support sustainable practices in the worlds of art and design.
- Reviewed residency projects, the on-site series “RAIR: Live at the Dump,” design/fabrication projects, and educational programs. More information can be found at [www.rairphilly.org](http://www.rairphilly.org).
- Upcoming events include the annual fundraiser and silent auction, the “Trash Bash,” on November 16, 2016 from 6-10pm, and an exhibition at Moore College of Art and Design from January through March 2017.
- This presentation will be made available on the SWRAC section of the Streets website.

#### **Informational Items and Announcements:**

- *Recycling Coordinator Search* – Mr. McGrath reported that the Deputy Commissioner will provide an update when he returns from vacation.
- *Greenworks Update* – Mr. Sharp sends his apologies for not being able to attend. Instead, meeting attendees shared recent announcements made about the new sustainability plan due later this year. Key points are:
  - The plan will be framed around 8 visions (one example being “All Philadelphians will waste less and keep our neighborhoods clean”) that will allow for the identification of specific goals/targets, as well as long-range planning objectives. These visions are based on feedback received from stakeholders about critical issues for a sustainable future in Philadelphia.
  - This framework will help engage a wide variety of stakeholders around Greenworks and new sustainability initiatives that result.

- Monitoring and evaluation will include robust data collection that can be shared with stakeholders to help inform their programs and operations, and help them to design data-driven interventions.
- Mr. McGrath also reported that he met with Christine Knapp and the Managing Director's Office. A broader set of waste and sustainability metrics will be introduced in the upcoming plan, expanding beyond the landfill diversion target set in the first Greenworks.
- *Keep America Beautiful Grant* – Mr. Esposito announced that a grant will fund 30 new recycling bins for parks and recreation centers this fall. He noted that this grant opportunity was brought to his attention at a SWRAC meeting, and credited Ms. Feldman, Mr. Sharp, and Ms. Lau for helping to submit a successful application. Keep Philadelphia Beautiful, the Office of Sustainability, and Streets Department will continue to work with Philadelphia Parks and Recreation this fall during the implementation of its outdoor recycling initiative at all 21 of its sites in the Northwest District.
- *Other announcements* – Ms. Van Story brought up two issues. First, she has learned that the City has identified early trash and recycling set-out in the neighborhood around Temple University as a problem. She offered to have her organization work with Sanitation to address this. She also requested that the Recycling Office assist a group of local students who wrote an original song to teach people how to recycle by reviewing it for accuracy. Ms. Sands announced that she is transitioning out of her role as Community Outreach Coordinator to take a new data management position with Recyclebank that will be based here in Philadelphia. Recyclebank is looking for her replacement; if the SWRAC knows of any qualified candidates, they should contact Denise McVeigh. Mr. McGrath also noted that September 24<sup>th</sup> will be the first Philly Free Streets event, which will highlight the intersection of active transportation and public health. Volunteers are needed to ensure this event offering free, fitness activities and educational programming is a success. Anyone interested in volunteering can contact him or sign-up at [philadelphiastreet.com](http://philadelphiastreet.com).

**Adjournment:** The meeting was adjourned at approximately 4:15 pm.

**MEETING NOTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC),  
ORGANICS RECYCLING SUBCOMMITTEE

**DATE:** August 23, 2016

**ATTENDEES:**

Adam Hendricks, PWD  
Emily Hill, PWD  
Paul Kohl, PWD  
Scott McGrath, Streets  
Marisa Lau, Streets  
Mike Giuranna, US EPA Region 3  
Fern Gookin, Revolution Recovery  
Michelle Feldman, Keep Philadelphia Beautiful  
Maurice Sampson, Clean Water Action  
Laura Cassidy, Prisons

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The meeting was called to order at approximately 9:00 a.m.

**Update from Department of Streets:**

- Scott McGrath gave an in-depth update, he presented:
  - The 6 month Organics Feasibility report that was issued to the PADEP in July for the organics feasibility study grant.
  - He presented the original scope of services for the study, the one used to obtain the grant from DEP. It is still the scope of work for the whole study. Task 1 (initiation and data gathering) was complete and task 2 (marketplace assessment) is underway.
  - Last fiscal year ended and so did the contracts with ARI and MSW. RFPs were issued and the City is in the process of conforming two contracts. One contract is for ongoing support of Act 101 compliance and eventual modification. It should be noted the Act 101 law is written in such a way as to be unfriendly to current methodologies of waste diversion. It was essentially written to address disposal not diversion or re-use. Therefore our submission contains considerably more material than prescribed but essential to our plans, and as such need to continue to be updated and monitored.
  - The current draft of the Act 101 plan is nearly complete. It will be submitted for the 90-day public comment period in early September. The public meeting will likely be aligned with September's SWRAC meeting. The final plan will include references to the Greenworks goals.
- The other contract is for additional work, such as the completion of the grant funded organics feasibility study and potential work into effect of zero waste policies. Streets expects the organics feasibility study to be complete in November and are working to align with the revised Greenworks plan.
- Streets will be applying for a 901 grant (PADEP) to conduct a waste sort on residential municipal solid waste.
- They are also applying for a "technical grant" to conduct a small focused waste sort of one sector of the commercial waste stream. The technical grant is small so a full waste sort of the commercial stream is not possible. Scott asked the subcommittee to think about the best

market sector to look at. He initially suggested the Hotel sector. The last commercial waste composition study was completed by the PADEP almost 15 years ago. This was a comprehensive study conducted at transfer station with labor supplied by various volunteers.

- The state \$2/ton fee on waste disposal is sun setting in 2020 – this may open the opportunity for revising state regulations related to waste disposal planning (Act 101). As discussed previously, the act is not written to accommodate modern recycling and diversion.
- During the last legislative year several laws we introduced or updated. These laws require the Department of Streets to update regulations. These efforts have not been pursued as of yet, but they are looking to the SWRAC to be a vehicle to help with revising them. Among other enhancements, they would be looking at enforcement of the dumpster bill that prevents the disposal of food waste. There was a brief discussion about the challenges for enforcement.

#### **Update from PWD:**

- Paul Kohl has met with PWD’s commissioner (D. McCarty) to discuss PWD digesting food waste. The meeting was positive but no immediate decisions were made.
- PWD’s operations division still needs to confirm the initial capacity assessment to determine how much food waste the department could take and how to phase it in.
- PWD also has an RFI in internal review for the pre-processing of food waste. PWD has made it clear that unlike East Bay MUD, it is not interested in receiving waste streams directly. The concept of concession contracting was discussed. Streets used this method to move forward with Big Belly advertising.
- Cost of food waste disposal, landfill tipping fees, composting and other processing information was obtained by consultant as they conducted the regional survey. This information will be shared with PWD. At the meeting it was presented that the fees varied widely and even the basis of the cost was not uniform. Some fees based on volume (cubic yards), some on weight (tons) and some on an algorithm of frequency of pick up.
- Regarding the possible selection of a targeted first market, the committee suggested two things.
  - Any food handling (processing) facility will have 20% to 40% of its process stream as a waste stream. This is a big market.
  - Specifically, grocery stores are a big and high quality market, and should be pursued first. The targeting of such a high quality stream is in the interest of the whole organic recycling industry. Even though this supply would make excellent soil via composting, the overall capacity to process food waste is currently small enough that any improvement in the “receiving” market would increase the development of collection market. This would lead to more competition.

#### **Other business:**

- Emily Hill from PWD provided a brief introduction to PWD’s Utility Wide Strategic Energy Plan. This plan sets goals for greenhouse gas reductions and renewable energy generation. In order to meet these goals, PWD would need to produce more biogas, which will require additional high strength wastes (ideally organics) to be processed by PWD.

**Next month’s meeting is tentatively scheduled for September 20<sup>th</sup>, from 9-10:30 AM.** It will be held at PWD offices located at 1101 Market Street, on the 3<sup>rd</sup> floor (Conference Room 3A).

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** September 22, 2016

**ATTENDEES:**

SWRAC Members

Michelle Feldman, Keep Philadelphia Beautiful (co-chair)  
Fern Gookin, Revolution Recovery (co-chair)  
Bob Anderson, ReCommunity Recycling  
Jack Embick, Environmental Law  
Paul Kohl, Philadelphia Water Department  
Scott McGrath, Director of Environmental Services, Streets Dept.  
Maurice Sampson, Niche Recycling  
Andrew Sharp, Office of Sustainability  
Vivian Van Story, Community Land Trust Corp.

Others Present

Nicholas Esposito, Philadelphia Parks and Recreation  
Amy Cornelius, Citizen

City Staff/Consultants

Marisa Lau, Streets Dept./Recycling Office  
Erin Cartwright, Recycling Office/Recyclebank

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**Call to order/introductions:**

The meeting was called to order by SWRAC co-chairs Fern Gookin and Michelle Feldman at approximately 3:10 p.m.

**Minutes:**

Meeting minutes from the August SWRAC meeting were approved by voice vote (Embick move, Anderson 2<sup>nd</sup>).

**Update on Solid Waste Plan (S. McGrath):**

- A list of recycling facilities serving Philadelphia and the region will be added to the plan, as previously suggested by Mr. Anderson. The consultants confirmed that this is not required by Act 101, however.
- SWRAC meeting was listed as the public meeting for the City's Draft Plan Revision. Public Notice started on September 5<sup>th</sup>, 2016 and will continue for 90 days. There are hard copies of the plan and the appendix at five libraries. The Department of Streets has printed 10 copies of both the plan and appendix and will issue them upon request. The draft plan is available online at:

<http://www.philadelphiastreet.com/recycling/solid-waste-recycling-advisory-committee-swrac/public-notice>

- SWRAC co-chairs asked for public comments on the draft plan.
  - Ms. Cornelius stated that the City should expand the BigBelly network to areas outside of Center City. There is a clear need for more bins in neighborhoods, such as 9<sup>th</sup> Street between the Italian Market and Bainbridge St, where a private citizen has put out a bin for public use to help combat littering. In addition, better recycling containers with lids would improve the litter problem. She has observed that residents often overstuff the containers, which leads to the collection crews dropping recyclables on the street. The City should find a comprehensive solution to address these related issues.
  - Ms. Cornelius brought up the topic of food waste and compostables. She heard it discussed by the director of the Office of Sustainability (OoS) at a recent SBN round table meeting.
    - The regional facility in Delaware is closed – we need to look for another solution.
    - OoS is looking for a regional facility; siting and permitting remain very real obstacles to overcome.
    - Sanitation is working with a consultant and other city agencies to prepare an organics feasibility study.

#### **Informational Items and Announcements:**

- *Organics Subcommittee* – Mr. Kohl announced that the subcommittee cancelled this month's meeting due to lack of substantial new information. He did have two brief updates to share. The City of Los Angeles contacted PWD regarding the Food Waste Disposer Bill and about commercial food waste anaerobic decomposition. They wanted to know the technical viability of these efforts. Also, an EPA internal working group on biogas has a white paper that has been widely read among staff, helping to create a common understanding of barriers to biogas between multiple Federal Agencies and within the Agency itself, where organizational silos are often hard to get out of. Available here:  
<http://www.americanbiogascouncil.org/pdf/AD%20and%20Applications-finalcls.pdf>
- *Office of Sustainability update* – Mr. Sharp announced that the updated sustainability plan will be released on November 2 at the Free Library (rooftop event). It is currently about 90% complete. The plan will be structured around eight visions for Philadelphia based on feedback received at public meetings. The vision statements will allow the City to acknowledge critical issues for the future—like climate change and energy—that are beyond its immediate control, and also demonstrate the integral role of citizens in the plan's implementation. OoS staff will create 1-year work plans with

annual reports and updates. In addition, they will build two new online tools: a sustainability data dashboard, and neighborhood index to help foster deeper neighborhood engagement with the plan, and ensure that issues disproportionately affecting certain areas of the City are addressed. Mr. Sharp then took comments and questions.

- It was noted that the Mayor has committed to finding a comprehensive solution to our city's litter problem and will announce a new, high level (across departments) initiative very soon.
  - The OoS will make summaries of the public meetings held as part of updating GreenWorks available to SWRAC members upon request.
  - Regarding new sustainability initiatives around the plan, staff are investigating different options, and also looking into what would be possible to achieve with the online tools (including 2-way communication with member of the public using these platforms).
- *Other announcements*
    - Several announcements about schools were made. Ms. Cartwright announced Recyclebank's Green Schools program has started and runs until December 4<sup>th</sup>. Ms. Feldman noted that KPB is hosting PhilaSoup's next event at their offices on October 23<sup>rd</sup> from 11am to 1 pm. Attendees will learn about KPB's in-school programming on litter, composting, and recycling, and mini-grants will be awarded directly to teachers to implement in-classroom projects. KPB, Recyclebank, and iSpring are also gearing up to start presentations again to support the rollout of recycling in the schools.
    - Mr. Sampson made a request for the Goals and Metrics Subcommittee to resume meeting next month. Mr. Embick seconded this request, and asked for clarification about whether new goals could be included in a revised version of the plan, or the plan appendix.
    - Mr. Kohl wanted to know if there was progress on developing regulations regarding the recent changes in the law passed last legislative session (dumpster bill). He was referred to the minutes of last month's meeting where it was discussed and it was suggested that a new SWRAC subcommittee be formed for this task. However, no progress has been made yet. The Department of Streets is looking for help in the composition of these regulations as it is a large task with many facets.
    - Mr. Anderson announced that ReCommunity would be installing a new baler at their Philadelphia plant, in the latest of a series of new investments there. He also was recently invited to the Mann Center for the Performing Arts to assess potential to capture recyclables. After viewing their operations, he thinks there is strong potential for a recycling program to be implemented.

- *Recycling Coordinator Search* – There was no update given in the hiring process, due to Mr. McGrath having to leave early.
- Ms. Feldman asked if there were any additional public comments on the municipal waste management draft plan before adjourning.

**Adjournment:** The meeting was adjourned at approximately 4:10 pm.

DRAFT

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** October 27, 2016

**ATTENDEES:**

SWRAC Members

Michelle Feldman, Keep Philadelphia Beautiful (co-chair)  
Fern Gookin, Revolution Recovery (co-chair)  
Paul Kohl, Philadelphia Water Department  
Bob Anderson, ReCommunity Recycling  
Andrew Sharp, Office of Sustainability  
Charles Raudenbush, Waste Management  
Jack Embick, Environmental Law  
Scott McGrath, Director of Environmental Services, Streets Dept.  
Sal Iadonisi, U.S. Recycling

Others Present

Laura Cassidy, Philadelphia Prisons System  
Tamika Davis, Philadelphia International Airport  
Amy Cornelius, Citizen

City Staff/Consultants

Erin Cartwright, Recycling Office/Recyclebank  
Marisa Lau, Streets Dept./Recycling Office

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**Call to order/introductions:**

The meeting was called to order by SWRAC co-chairs Fern Gookin and Michelle Feldman at approximately 3:10 p.m.

**Minutes:**

Meeting minutes from the September SWRAC meeting were approved by voice vote (Embick move, Sharp 2<sup>nd</sup>).

**Goals Subcommittee Report (M. Lau):**

The subcommittee reviewed meetings notes and documents from the beginning of 2016 about developing a zero waste framework, and discussed how the framework would be integrated into the solid waste management plan. Much of the discussion focused on the impending release of the City's Greenworks plan as well as other upcoming City initiatives to address litter and waste reduction; the subcommittee will continue to work closely with partners like the Office of Sustainability moving forward. The discussion moved on to what data is needed to establish a zero waste framework in the Philadelphia context. Subsequently, the immediate

priorities for the subcommittee are defining "zero waste" for Philadelphia, and setting targets to measure our performance against. The date for the next subcommittee meeting will be set soon.

### **Organics Subcommittee Report (P. Kohl):**

Earlier this week, Mr. Kohl began the subcommittee meeting with a brief reminder about the purpose of these meetings: to help the city figure out what to do with food waste and other organic waste streams. Given the importance of this objective and the potential for us to effect change in the area of organics recycling, we should all take the work done by this group seriously.

Updates from Streets (S. McGrath), MDO (N. Esposito), and Water (A. Hendricks):

- Scott is meeting with the consultant for the food waste feasibility study following this meeting. The contracts have been conformed for this study, so there are no further administrative hurdles. Work completed to date includes inventory work and baseline market information gathering. Next steps include major market assessment and collection analysis. They will also look at opportunities available for the end product, to ensure that compost can be beneficially used. Parks & Rec (Marc) and Prisons (Laura) both commented that they have no problems moving the compost they produce; in fact they can't make enough to meet demand, which is promising.
  - Kendall asked if a GHG analysis for food waste processing would be conducted. Scott said it would likely not be part of the feasibility study, but they could look at that through other means.
- Paul commented that the consultant and the group should also think about market development. This is the area of organics recycling and diversion that needs to grow. Scott agreed but stressed that the City likely does not have the means to make a large capital investment. It is anticipated that capital investment would be made from the private side, which further demonstrates the need to focus on the commercial market, where such partnerships are cost effective. Apparently one local vendor stopped sending their waste to be composted because of cost issues.
  - A market resource would be a full service waste hauler, able to handle garbage, recycling and organics; we don't seem to have one in Philly. Subcommittee members noted that other cities have such full service vendors, and that after we help establish the market they will come.
  - Even though it is illegal to dispose of food waste in the garbage within Philadelphia it is still legal to take that separated food waste to a landfill. This makes food waste disposal banning critical.
- Nic is now working in the Managing Director's Office. He is focused on litter and waste issues, with an eye toward food waste.

- He is investigating how PPR manages their waste, including recycling, food waste and other waste streams, and spoke about PPR's strategies around composting.
- PPR produces significant amounts of food waste. He estimated that PPR recreation facilities generate approximately 100 tons/year of food waste. To get this estimate, he collected food waste from one Recreation facility for a time period. The food waste was of high quality due to the attention paid to this project, and ended up yielding about 40 pounds or 12.5 tons per year. Thus with 8 similarly-sized recreation centers, each with after school programs that distribute food, he estimates 100 tons a year of food waste.
- To add to this, PPR is the second largest distributor of food in the city by combining its after school and summer programs.
- He is looking for space for the City to conduct additional composting beyond the Fairmount Park facility. The primary issues are staffing and location. He has a potential location in mind, but would likely need to partner with an outside agency for collection and delivery.
- Adam reported that recent movement has taken place on the NJ food waste disposal bill (S-771). It has passed out of the first committee with the following amendments:
  - Changed the radius to a facility from 35 miles to 25 road miles.
  - Clarified that the facility must be within the state of NJ.
  - Changed the start date of the legislation from 2017 to 2019.
  - Added a municipal fee – facilities must pay \$0.50/ton to the municipality they operate in.
- Kendall commented that a bill that bans the disposal of food waste in landfills may be introduced to the New York State Assembly after the new year.
- The next Organic Subcommittee meeting will be December 6<sup>th</sup> from 9:00-10:00 AM. It will be held at PWD offices located at 1101 Market Street, on the 3<sup>rd</sup> floor (Conference Room 3A).

**Sanitation Division Updates (S. McGrath):**

- PA DEP is now in possession of a copy of the draft plan; as the result of a misunderstanding, they were sent a copy after the public comment period had started.
- Sanitation anticipates that they will be able to bring the plan before City Council for a vote early next year.
- Aside from the helpful comments given by Ms. Cornelius at the last SWRAC meeting and her subsequent emails expanding on these, no other comments have been received. ARI is preparing a response document. Sanitation aims to finish revising the draft plan in December. The public comment period will end on December 14, 2016 (90 days after the second public notice).

- The department is pursuing a new option to fill the position of Recycling Coordinator. They hope to have news to share soon.

#### **Informational Items and Announcements:**

- *Greenworks* – Mr. Sharp will circulate information by email to SWRAC and interested parties about the Greenworks release event on November 2. An RSVP is required, although they are near capacity.
- *Leaf recycling program* – Mr. McGrath said leaf recycling will start on Nov. 7 with mechanical collections; Saturday drop-off events at 23 locations plus collections at the sanitation convenience centers will begin later in the month. Tonnages were up last year, and the same level of service will be provided this year. As the Department continues to catch up with truck replacements for trash and recycling, it is projected that it can look at purchasing leaf trucks in 2-3 years.
- *Total Recycle visit* – Ms. Lau reported that the Philadelphia Recycling Office took a tour of the new J.P. Mascaro MRF in Birdsboro, PA. They are able to provide tours (with a presentation and video beforehand), which may be of interest to the Philadelphia School District, as schools are now sending recycling to this facility. The facility is 75,000 square feet and entirely new. They can process 10k tons per month and currently are doing 5k. She remarked on the noticeable difference in the recycling stream, in which newspaper seemed far more prevalent than in Philadelphia. Mr. Anderson and Mr. Raudenbush suggested that this was because suburban areas generate less plastic and glass (containers) than urban areas.
- *America Recycles Day* – Recyclebank, KPB, and Streets are filming a new recycling PSA in November. Stay tuned!
- *Green Futures Presentations/PD days*
  - Ms. Feldman reported that Keep Philadelphia Beautiful reached approximately 1800 students through 50 separate presentations in 2016.
  - School District GreenFutures presentations will likely resume early next year. The District is determining now which schools will be included in the next wave of facilities receiving recycling dumpsters and bins – presentations will be targeted to students at those particular schools.
  - In response to feedback received from in-classroom teachers, the School District and Keep Philadelphia Beautiful are launching a series of three professional development trainings to assist educators in guiding their students from workshop to environmental action. The first PD day will take place on

11/3 at KPB's offices, and will use the national Eco Schools model to break down how to build a successful school green team.

- *KAB Recycling Bin Grant* – Ms. Feldman reported that the public space recycling bins received through a national Keep America Beautiful grant program have been delivered and will be installed next month. PPR is meeting internally to discuss how they would like to move forward with educational programming associated with the new bins
- *Next meeting* – It was decided to hold a combined Nov/Dec meeting by the group. The final meeting of the year was scheduled for Dec 8<sup>th</sup> at the time, but was subsequently changed to Dec 6<sup>th</sup> due to a scheduling conflict.

**Adjournment:** The meeting was adjourned at approximately 4:50 pm.

DRAFT

## Philadelphia SWRAC Goal-Setting Subcommittee: Meeting Notes from 10/24/2016

### Members Present:

Michelle Feldman, Maurice Sampson, Jack Embick, Andrew Sharp, Carlton Williams, Scott McGrath, Nic Esposito, Marisa Lau

### Discussions:

- *Understanding the broader planning context* – The group discussed how the subcommittee’s work can best fit into related efforts to develop a zero waste vision for Philadelphia. This includes a new interagency initiative on waste and litter, and the upcoming release of *Greenworks* and a waste-related vision for Philadelphia within that plan.
  - The subcommittee will work closely with the Office of Sustainability to set interim goals in zero waste, including a working definition for zero waste in Philadelphia.
    - Mr. Sharp indicated that more baseline info about MSW generation would be helpful in this regard.
- *Developing a goals framework* – Over the next few months, the subcommittee will work to identify and gather all necessary data to set goals. The following should be taken into consideration:
  - Commercial waste as well as municipal waste needs to be addressed.
  - Sub-components of the waste stream need to be defined, such as what counts as “organics”.
  - A new waste characterization study will be completed in 2017; the averaged results of quarterly municipal recycling sorts from 2016 will soon be available. The waste stream has changed significantly since the last characterization study. For example, paper is disappearing from the stream.
  - Efforts to change citizen behavior and social norms need to be accounted for.
  - Operational factors, including collection capacity based on truck availability, should be included.
- *Forming a work plan* – The subcommittee can start developing a framework now using the best data currently available; updated and new data can be incorporated later.
  - Analysis performed by Niche Recycling shows that Philadelphia can achieve zero waste by 2035 with a 4% annual reduction in MSW generation. Mr. Sampson explained that while this goal could only be met through significant infrastructural investments and operational changes, a 4% reduction could be achieved in the near future by decreasing the municipal recycling contamination rate. It was generally agreed that a flexible planning process, based on progress being made and fiscal resources available, would be necessary in order to reach zero waste.
  - Deputy Williams, Mr. McGrath, and Mr. Sharp expressed concern that the annual budgeting process would make it difficult to anticipate what resources will be available from year to year. As an alternative, Mr. Sharp proposed setting a 4-year goal for waste reduction; this reporting period would allow the City to track and adjust course based on changes to its waste stream.

### Other Comments:

- Deputy Williams briefly described how the Sanitation Division conducts research projects; subcommittee members discussed possible implications of the annual City budgeting process for the design and implementation of larger projects.
- Deputy Williams asked the subcommittee to think more broadly about why Philadelphia needs a zero waste goal. What economic, environmental, and other types of benefits will accrue to citizens,

businesses, and other stakeholders through the policy and program changes we will eventually recommend?

**Next Meeting:**

Michelle or Marisa will check availabilities and notify everyone of the next meeting date.

**MEETING NOTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC),  
ORGANICS RECYCLING SUBCOMMITTEE

**DATE:** October 28, 2016

**ATTENDEES:**

Adam Hendricks, PWD  
Emily Hill, PWD  
Paul Kohl, PWD  
Fern Gookin, Revolution Recovery  
Maurice Sampson, Clean Water Action  
Mike Giuranna, US EPA Region 3  
Laura Cassidy, Prisons  
Nic Esposito, MDO  
Kendall Christiansen, Gaia Strategies  
Marisa Lau, Streets  
Scott McGrath, Streets  
Marc Wilken, Parks and Rec (PPR)

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The meeting was called to order at approximately 9:00 a.m.

**Opening Remarks:**

- Paul wanted to remind the group of our purpose: to help the city figure out what to do with food waste and other organic waste streams. This group is important and the people involved have enormous potential to affect change in this area within the City.
- Paul asked the question that if we don't move these ideas forward, who will? He stressed we should take the group seriously as what we do matters.

**Update from Department of Streets:**

- Scott is meeting with the consultant for the food waste feasibility study following this meeting to pick up on the work.
- The contracts have been conformed for this work so there are no other admin hang-ups.
- Work completed to date includes inventory work and baseline market information gathering.
- Next steps include major market assessment and collection analysis.
- They will also look at opportunities available for the end product, for example to ensure that compost can be beneficially used. Parks & Rec (Marc) and Prisons (Laura) both commented that they have no problems moving the compost they produce; in fact they can't make enough to meet demand, which is promising.
- Kendall asked if a GHG analysis for food waste processing would be conducted. Scott said it would likely not be part of the feasibility study, but they could look at that through other means.
- Paul commented that the consultant and the group should also think about market development. This is the area of organic recycling and diversion needs to grow. Scott agreed but stressed that the City likely does not have the means to make a large capital investment. So it is anticipated that capital investment would be made from the private side, which further delineates the need to focus on the commercial market, where such partnerships are cost effective.

- Apparently one local vendor stopped sending their waste to be composted because of cost issues.
- A market resource would be a full service waste hauler, able to handle garbage, recycling and organics, we don't seem to have one in Philly. It was noted that in other cities, there are such full service vendors and that after we help establish the market they will come.
- Even though it is illegal to dispose of food waste in the garbage within Philadelphia it is still legal to take that separated food waste to a landfill, for as much sense as that makes. This makes food waste disposal banning so important.

#### **Nic Esposito/MDO:**

- Nic is now working in the Managing Director's Office as the Zero Waste and Litter Director. He is focused on litter and waste issues, with an eye toward food waste.
- He is investigating how PPR manages their waste, including recycling, food waste and other waste streams.
- He spoke to us about PPR's strategies around composting.
- PPR produces significant amounts of food waste. He estimated that PPR recreation facilities generate approximately 100 tons/year of food waste. To get this estimate, he collected food waste from one Recreation facility for a time period. The food waste was of high quality due to the attention paid to this project, and ended up yielding about 40 pounds or 12.5 tons year. Thus with 8 recreation centers, similarly sized, that have after school programs to distribute food, he estimates 100 tons a year of food waste.
- To add to this, PPR is the second largest distributor of food in the city by combining its afterschool programs and summer programs.
- He is looking for space for the City to conduct additional composting beyond the Fairmount Park facility. The primary issues are staffing for a facility and location. He has a potential location in mind, but would likely need to partner with outside agency for collection and delivery.

#### **Update on NJ legislation:**

- Recent movement has taken place on the NJ food waste disposal bill (S-771). It has passed out of the first committee with the following amendments:
  - Change in the radius to a facility from 35 miles to 25 road miles.
  - Clarified that the facility must be within the state of NJ.
  - Changed the start date of the legislation from 2017 to 2019.
  - Added a municipal fee – facilities must pay \$0.50/ton to the municipality they operate in.
- Kendall commented that New York State is looking to introduce a bill that bans the disposal of food waste in landfills into the state assembly after the new year.

Next month's meeting was tentatively scheduled for December 13<sup>th</sup>, but at the subsequent SWARC meeting we were asked to consider moving it to the 6<sup>th</sup>. **Thus, the Organic subcommittee meeting will be December 6<sup>th</sup> from 9:00-10:00 AM.** It will be held at PWD offices located at 1101 Market Street, on the 3<sup>rd</sup> floor (Conference Room 3A).

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** December 6, 2016

**ATTENDEES:**

SWRAC Members

Michelle Feldman, Keep Philadelphia Beautiful (co-chair)

Fern Gookin, Revolution Recovery (co-chair)

Bob Anderson, ReCommunity Recycling

Jack Embick, Environmental Law

Scott McGrath, Director of Environmental Services, Streets Dept.

Charles Raudenbush, Waste Management

Maurice Sampson, Clean Water Action

Others Present

Amy Cornelius, Citizen

Craig Roncace, U Penn Urban Park Manager

City Staff/Consultants

Erin Cartwright, Recycling Office/Recyclebank

Marisa Lau, Streets Dept./Recycling Office

Justine Bolkus, Commerce

Tamika Davis, Philadelphia International Airport

Nic Esposito, MDO

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**Call to order/introductions:**

The meeting was called to order by SWRAC co-chairs Fern Gookin and Michelle Feldman at approximately 3:15 p.m.

**Minutes:**

Meeting minutes from the October SWRAC meeting were approved by voice vote.

**Goals Subcommittee Report (S. McGrath):**

McGrath announced that the Sanitation Division will prepare a technical document discussing how the City can achieve zero waste by 2035. Subcommittee members have been informed that the next meeting will be postponed until a draft of this document has been circulated, which can provide a focal point for the subcommittee's discussions moving forward.

## **Organics Subcommittee Report**

Due to cancellation of this month's subcommittee meeting (which was subsequently rescheduled for January 10th) there was no report to the SWRAC.

## **Solid Waste Plan Update (S. McGrath):**

- The Recycling Office is continuing to revise the draft plan based on comments received from SWRAC and others during the public comment period, which ends next week. With the help of consultants, they are also preparing a required response document.
- Lau announced that the office has begun work on an abridged version of the Act 101 plan, to serve as a guide for residents, City officials, and other interested parties. The interagency discussion around waste reduction strategies that has taken place during the last few months can be integrated into this new document.
  - Sampson suggested that we explain more clearly to the public that Act 101 plans are not planning documents, but technical documents. A planning document is still needed that outlines a strategy to achieve the plan objectives.

## **Informational Items and Announcements:**

- *RAIR/Revolution Recovery Update* – Gookin reported that RAIR's Trash Bash fundraiser in November was a success: more than 300 people attended and the event has seen considerable growth over the last few years. Revolution Recovery recently acquired the property adjacent to their Philadelphia location. The property will give more room to their existing operations and allow for some growth in the regional market.
- *MDO Update* – Esposito gave an update to the forthcoming Zero Waste and Litter Cabinet that will be announced at the end of the month and the desire to work with SWRAC on a Zero Waste definition and planning
- *Green Schools Update* – Cartwright let SWRAC members know that the deadline to apply has been extended to Sunday, December 11<sup>th</sup>. She encouraged SWRAC members to spread the word to any school contacts they have.
- *America Recycles Day PSA and Op-Ed* – SWRAC members viewed the new recycling public service announcement and received a copy of the Philly.com op-ed co-authored by Deputy Commissioner Carlton Williams, Recyclebank Senior Account Manager Denise McVeigh, and KPB Executive Director Michelle Feldman.
  - Lau asked for ideas to increase the impact of this video or build on these outreach efforts.
    - Sampson suggested that the video/op-ed links be cross-marketed with the Recycle by City quiz for Philadelphia, and recipients urged to test

their knowledge after viewing. New videos can even be structured around different quiz questions. This would allow quiz results to more directly track the effectiveness of City outreach.

- Another suggestion was to use this type of video as an outreach tool to students, and ask organizations like Campus Philly or Post-Landfill Action Network to help distribute it. It was noted that Penn has struggled with BigBelly recycling contamination on its campus.
  - Recycling competitions like RecycleMania have been proven to successfully improve campus recycling.
- *Parks & Rec Recycling Launch* – Esposito recapped this project to bring outdoor recycling to all 23 facilities in District 4. Streets Department and PPR Operations team coordinate on collections using a PPR-procured recycling truck and a dumpster serviced by Streets' condo collections truck. At staffed facilities, Center Caretakers set out bins for regular curbside collections. PPR is reviewing the costs and materials needed and writing a blueprint for how to roll out recycling to other parts of the city.
  - *Leaf Recycling Results & Holiday Recycling* – McGrath reported that 550 tons of leaves have been collected through the end of November, and tonnages are expected to increase by the time the program ends this month. Lau reported that the City's first e-blast about its efforts to promote recycling during the holiday season went out today. The program info is now up on PhiladelphiaStreets.com. Sanitation is prepared for a substantial increase in recycling tonnages during the holiday season, and offering a Christmas tree recycling drop-off program again this year.
  - *Parks & Rec Leaf Recycling* – Esposito reported that food waste diverted from the Marathon was brought to Fairmount this year to be mixed into leaf mold compost and is being monitored.
  - *PROP conference in King of Prussia* – Raudenbush announced the next statewide recycling conference is taking place in southeastern PA this year (last held here 14 years ago). A tour of Covanta's facility will be offered and conference topics will focus on issues facing this region. Any suggestions for speakers are welcome.
  - *Next meeting date TBD* – A meeting invite with the schedule for the full year will be emailed in January.

**Adjournment:** The meeting was adjourned at approximately 4:30 pm.

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** January 18, 2017

**ATTENDEES:**

SWRAC Members

Michelle Feldman, Keep Philadelphia Beautiful (co-chair)

Fern Gookin, Revolution Recovery (co-chair)

Paul Kohl, Water Dept.

Sal Iadonisi, U.S. Recycling

Scott McGrath, Streets Dept.

Charles Raudenbush, Waste Management

Maurice Sampson, Clean Water Action

Vivian Van Story, Community Land Trust

Others Present

Amy Cornelius, Citizen

Sara King, U Penn

City Staff/Consultants

Everett Burgess, Recycling Office/Recyclebank

Erin Cartwright, Recycling Office/Recyclebank

Marisa Lau, Streets Dept./Recycling Office

Tamika Davis, Philadelphia International Airport

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**Call to order/introductions:**

The meeting was called to order by SWRAC co-chairs Fern Gookin and Michelle Feldman at approximately 3:35 p.m.

**Minutes:**

Meeting minutes from the December SWRAC meeting were approved by voice vote.

**Zero Waste and Litter Initiative (Deputy Commissioner C. Williams):**

Deputy Williams gave a presentation originally prepared for the Zero Waste and Litter Cabinet describing how the City can achieve zero waste by 2035. The presentation summarized Streets Dept. policies and programs that have significantly reduced the amount of waste generated over the last decade, and increased diversion of organics and other materials for recycling. Additional programs that reduce and divert waste in Philadelphia were also outlined.

#### Questions from SWRAC

- How is the City defining zero waste?
- It could be confusing that recycling tonnages have stayed about the same in recent years (due to lightweighting and other changes to the stream), while the diversion rate has increased. Needs additional explanation?
- Curbside recycling is a problem around Temple – from sparse participation, to incorrect set-outs, to late night collections by private haulers. Can the Cabinet engage stakeholders in this area to address these issues?

#### Comments from SWRAC

- Having a zero waste goal along with programmatic incentives like a competition should be effective in motivating businesses to reduce waste.
- Waste hauling industry and their customer base need to be brought into planning efforts; downstream vendors for recyclables also need to be engaged.
- Home composting should have a place in any organics recycling strategy used.
- Some of the technical terms in the presentation may not be familiar to audiences (for example, “OCC” instead of “cardboard”) and graphics could be improved for projection purposes.
- Philadelphia Housing Authority should be part of the Cabinet, if it isn’t already.

#### **Organics Subcommittee Report (P. Kohl):**

This month’s subcommittee meeting began with an update that PWD is working to upgrade its food waste co-digestion feasibility study with new information and expand analysis to both plants (currently only assesses the Southwest plant). Nic Esposito (Zero Waste and Litter Cabinet Director) then discussed a new executive order by Mayor Kenney creating a cabinet that will develop an action plan for waste and litter reduction. The Mayor has also set a zero waste goal by 2035 for the City. The cabinet, which consists of 16 members from various City agencies, nonprofits, and the private sector, will deliver the action plan in 6 months. The subcommittees that have been established so far are: Data, Communications, Waste Reduction, and Enforcement and Behavioral Science. SWRAC and its subcommittees can support the work of the Cabinet, specifically through ongoing efforts to define zero waste in Philadelphia. Next, Scott McGrath gave an update on the organics feasibility study. Streets is slightly reworking the scope of the study in order to take a closer look at market availability for organics processing and research policy recommendations. The Streets consultant will attend next month’s subcommittee meeting to give a more thorough update. The meeting wrapped up with a legislative update on NJ’s flawed food waste recycling bill, and a discussion about inviting DEP to present on permitting issues for composting facilities.

### **Solid Waste Plan Update (M. Lau/ S. McGrath):**

ARI and PRO will meet next week to go over the revised draft of the plan that incorporates public and SWRAC comments receive. They will also review the draft response document to be included in the plan appendix.

### **Informational Items and Announcements:**

- *Green Schools Update & Staffing update* –Ms. Cartwright announced that two Philadelphia schools have already met their goals, although the donation period has just begun. Schools’ progress can be tracked on the program page on Recyclebank’s website. She also introduced the new Community Outreach Coordinator, Everett Burgess. He began working with Recyclebank as a customer service representative, and is from Philadelphia.
- *School presentations* – Ms. Feldman gave an update on the next round of Green Futures presentations. Schools with newly received recycling dumpsters are being encouraged by the outreach team to schedule recycling workshops. The School District, along with KPB and PRO, also participated in the Girard College Day of Service last month. Partners held two workshops on building successful recycling programs and volunteers made recycling signage for use in the schools.
- *RAIR news* – Ms. Gookin announced that the opening reception for a new exhibition at The Galleries at Moore College of Art & Design will take place on January 27. *RAIR: Filthy Rich – Projects made possible by the waste stream* is a survey of residencies, special projects and performances challenging our perceptions of “trash” on view through March 11.
- *Other Streets announcements* – PRO will circulate the results of leaf recycling and holiday recycling, and the dates of the Block Captain Rally and Philly Spring Clean by email following the meeting.

**Adjournment:** The meeting was adjourned at approximately 5:00 pm.

**MEETING NOTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC),  
ORGANICS RECYCLING SUBCOMMITTEE

**DATE:** January 10, 2017

**ATTENDEES:**

Adam Hendricks, PWD

Emily Hill, PWD

Paul Kohl, PWD

Maurice Sampson, Clean Water Action

Mike Giuranna, US EPA Region 3

Nic Esposito, MDO

Marisa Lau, Streets

Scott McGrath, Streets

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The meeting was called to order at approximately 9:00 a.m.

**Opening Remarks:**

- Paul Kohl stated that PWD is working to upgrade our food waste co-digestion feasibility study with some new information and expanding the analysis to both plants (currently only assess the Southwest plant).

**Vision of Zero Waste and Litter – Nic Esposito/MDO**

- Nic Esposito, Philadelphia's Zero Waste and Litter Director, discussed a new executive order by Mayor Kenny that creates a cabinet to build an action plan for waste and litter reduction. This stems from the Mayor's transition plan (litter reduction) and the desire of the Managing Director to make progress on both issues.
- The Mayor has also set a goal of 2035 for zero waste for the City.
- The cabinet has 16 members across city agencies and outside partners, in an effort to spread the burden of these goals out from just the Streets Department.
- The first cabinet meeting is in roughly two weeks from this meeting date.
- The cabinet is required to have a zero waste and litter plan for the Mayor in 6 months, and then to produce a yearly progress report (every September).
- There are five subcommittees as well, including:
  - Data
  - Communication and Engagement
  - Waste Reduction
  - Enforcement/Cleaner Public Spaces
  - Behavioral Science
- There are additional opportunities to add Ad Hoc Committees as needed.
- There is a website in the works that will serve as a clearing house for litter related issues.
- Carlton Williams (Streets) will be giving updates to the cabinet from the SWRAC. Streets and the SWRAC are to work out the details of the final zero waste goal.
- A brief discussion started on the role of the SWRAC – whether it is to advise, develop policy, etc. It was always assumed the subcommittees of the SWRAC would do more of the ground work, and the SWRAC as a whole was to advise and recommend.

### Update on organics feasibility study – Scott McGrath/Streets

- Scott discussed that they are slightly reworking the scope of the organics feasibility study, and Streets is adding more money to expand the scope.
- This expansion will include a further look into the market availability for organics processing and research into policy recommendations for the future.
- Terry will attend next month's meeting to give a more in depth update on the progress.
- They also want to look closer at the Fairmount Park composting facility to see if additional opportunities are present at that location.
- Discussion of expanding composting capacity lead to a discussion of permitting. Maurice stated that the DEP has a history of working with composters to find a permitting solution to make their facility work.
- The potential to bring someone from the DEP to a future meeting to talk permitting was discussed. Some names were suggested, and Mike mentioned he'd reach out to DEP contacts to see who the best person to lead that discussion is.

### Closing discussion:

- The next PROP conference will be in July near Philadelphia. The sustainability office is being invited and subcommittee members were encouraged to try to attend.
- Also the Act 101 recycling fee is up for renewal, the PROP board has hired a lobbyist to help ensure that renewal happens.
- One of the key parts of Act 101 is the landfill disposal fee in it. This \$2 per ton disposal fee is collected on all garbage disposed of at municipal waste landfills and waste-to-energy plants in the State. This money is then used for recycling programing, public education, and so forth. Grants originating from this fee have been a large help in expanding recycling within the State.
- There is hope that the fee will stay partially because the legislature is always using the excess funds for pet projects.
- There are no positive updates to any of the existing outstanding food waste legislations (NJ and ME). The Maine bill appears to have died in the State Senate.
- A brief discussion on the NJ bill was had, specifically to see if the revision that requires a \$0.50 per ton fee to be paid from the recycler to the municipality, was still present in the legislation. At the time of these meeting notes that provision is still present in the bill. As this fee is required to be paid by the processor, it will act as a huge disincentive to investment in the food waste recycling industry. The margins on food waste recycling are small and any fee would be likely to kill projects in the works. This type of fee is absent from any of the other food waste disposal legislation we have reviewed. It was discussed further that this fee, if not removed, is likely to kill the bill, as all support from food waste disposers is gone with the fee.
- Paul Kohl mentioned that he has become a member of PBEA (PA Biomass to Energy Association), which is having a conference in September.
  - Details: The Mid-Atlantic Biomass Energy Conference and Expo, Sept 12-14, 2017, State College, PA, "Building the Bioeconomy," [www.mabex.org](http://www.mabex.org).

**Next month's meeting will be February 21<sup>st</sup> from 9:00-10:00 AM.** It will be held at PWD offices located at 1101 Market Street, on the 3<sup>rd</sup> floor (Conference Room 3A).

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** February 23, 2017

**ATTENDEES:**

SWRAC Members

Michelle Feldman, Keep Philadelphia Beautiful (co-chair)

Fern Gookin, Revolution Recovery (co-chair)

Robert Anderson, ReCommunity

Paul Kohl, Water Dept.

Denis Murphy, Commerce Dept.

Scott McGrath, Streets Dept.

Charles Raudenbush, Waste Management

Maurice Sampson, Clean Water Action

Vivian Van Story, Community Land Trust

Others Present

Amy Cornelius, Citizen

Craig Roncace, U Penn

Kathleen Grady, Temple

City Staff/Consultants

Everett Burgess, Recycling Office/Recyclebank

Erin Cartwright, Recycling Office/Recyclebank

Marisa Lau, Streets Dept./Recycling Office

Nic Esposito, MDO

Christine Knapp, Office of Sustainability

Dominic McGraw, Office of Sustainability

Keith Warren, Streets Dept.

Carlton Williams, Streets Dept.

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**Call to order/introductions:**

The meeting was called to order by SWRAC co-chairs Fern Gookin and Michelle Feldman at approximately 3:15 p.m.

**Minutes:**

Meeting minutes from the January SWRAC meeting were approved by voice vote (Raudenbush move, Sampson 2<sup>nd</sup>).

**Informational Items and Announcements:**

- *Solid Waste plan (M.Lau)* – A draft response to public comments has been completed and will be circulated by email to the SWRAC. The revised plan will be sent to DEP in early March. As a reminder, the dates of the Mayor’s Kick-off event, Block Captain Rally, and Philly Spring Clean Up this year are 3/8, 3/25, and 4/8.
- *Recycling Office outreach (M.Lau)* – This annual project will begin next month and again focus on residential multifamily properties and commercial properties. SWRAC will receive progress updates over the nine-month project period and a final summary.
- *Green Futures/KPB update (M.Feldman)* –
  - *School District GreenFutures-* Recycling presentations at targeted School District facilities are underway, courtesy of KPB, Recyclebank, iSpring and CMC. KPB continues to offer presentations to all District schools through its volunteer teacher program, and is on track to reach 1700 students this semester.
  - *Professional development day-* KPB’s second professional development workshop for teachers, in partnership with the School District, will take place next week. The focus will be conducting a waste audit, as a concrete project for a Green Team.
  - *Spring cleanups-* KPB will be hosting a community beautification event at Hunting Park with the Streets Department for the Philly Spring Cleanup, but also has cleanup opportunities scheduled for Earth Day (in Point Breeze) and Love Your Park week (at Penn Treaty Park).
- *Other updates* –
  - Chuck Raudenbush proposed inviting PAR-RecycleWorks to a future meeting to present on their e-waste recycling business that creates jobs for people who were formerly incarcerated. He also suggested that the SWRAC volunteer for the Phillies Red Goes Green program this season. Dates fill up fast.
  - Erin Cartwright announced that the last day to donate points to the Green Schools program is March 15 this year.
  - Bob Anderson shared news about the recycling markets. The price for cardboard and HDPE has risen quickly, driven by demand, but these gains may not be sustained.

**Organics Subcommittee Report (P. Kohl):**

*[To be added]*

**Zero Waste and Litter Update**

- Commissioner Williams described a new partnership program under development by the Streets Department to incentivize and assist large-scale organizations, community-based organizations, and residents in reaching the City’s goal for a zero waste and litter-free Philadelphia. Accreditation will take into account a range of strategies to

choose from, tailored to each program tier. For example, large-scale organizations could receive credit for following green procurement policies and holding zero waste events, while community groups could be recognized for waste diversion from community clean ups. Recyclebank is developing new mechanisms to recognize residents' zero waste efforts beyond recycling. More details about the partnership program will be shared at the next meeting, while the Department is looking for input from the SWRAC on how to design and implement the program.

- Maurice Sampson added that the RecycleMania model, which uses competition to promote desired behavior among students and on campuses, might be replicable here.
- The Commissioner also introduced the new Deputy Commissioner of Sanitation and former Chief of Operations, Keith Warren.
- Nic Esposito, Zero Waste and Litter Director, reiterated that the cabinet is tasked with preparing an action plan to achieve a zero waste and litter-free Philadelphia by 2035. In addition to the partnership program described by the Commissioner, the cabinet is also considering how to use regulatory tactics to increase compliance with waste and recycling laws, and possible legislative actions to strengthen these laws. The SWRAC is being asked to develop a zero waste definition for the action plan that captures Philadelphia's waste footprint and identifies a way to calculate our true diversion rate.
  - Christine Knapp added that the definition should identify which processes, not only which materials, count as diversion.
  - Vivian Van Story added that community-based organizations have invaluable knowledge about chronic problems like illegal dumping; City agencies and inspectors would benefit from partnering with these groups.

### **Group discussions**

Ms. Feldman asked the SWRAC to form two working groups to assist with each of these tasks. SWRAC meetings will follow this format until the action plan is complete.

### **Group reports**

Ms. Cartwright reported that Commissioner Williams distributed a handout outlining the Zero Waste Partnership program and briefed the group on how they plan to target and incentivize businesses, community based organizations, and residents to participate. Key points discussed by the group included:

- Expanding tax incentives for businesses that undertake zero waste initiatives
- How to best utilize existing resources and programs, such as Recycling Rewards & Keep Philadelphia Beautiful's quarterly meeting of neighborhood leaders

It was decided that LevLane will be invited to the next SWRAC meeting to help with continued brainstorming and formulation of ideas.

Ms. Gookin reported that Ms. Lau distributed a copy of the 2015 commercial recycling tonnages collected in Philadelphia that was reported to PA DEP. The group began discussing:

- What additional information is needed about our current diversion from the residential and commercial sectors
- Additional items and activities we might want to include in our diversion rate (thinking outside of the box)
- How best to calculate our rate (for instance, is calculating weight the best means of describing our diversion rate?)

It was decided that the Recycling Office will prepare a draft framework for the next SWRAC meeting that can help the group develop a more accurate accounting of what is currently diverted from landfills as they consider how to define zero waste.

**Adjournment:** The meeting was adjourned at approximately 4:45 pm.

DRAFT

**MEETING NOTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC),  
ORGANICS RECYCLING SUBCOMMITTEE

**DATE:** February 21, 2017

**INVITEES:**

Adam Hendricks, PWD  
Emily Hill, PWD  
Paul Kohl, PWD  
Fern Gookin, Revolution Recovery  
Mike Giuranna, US EPA Region 3  
Laura Cassidy, Philadelphia Prisons System  
Nic Esposito, MDO  
Kendall Christiansen, Gaia Strategies  
Marisa Lau, Streets  
Marc Wilken, Parks and Rec  
Scott McGrath, Streets  
Terry Keene, Keene Environmental Consulting LLC

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The meeting was called to order at approximately 9:10 a.m.

**Opening Remarks:**

- Paul Kohl started off the meeting with a discussion of some existing anaerobic digestions issues across the nation.
  - New York Times recent article about new AD facility in New York:  
<https://www.nytimes.com/2017/02/15/magazine/the-compost-king-of-new-york.html>

**Update on organics feasibility study**

- Terry Keene provided the group with an update on the organics feasibility study.
- On June 30<sup>th</sup> 2016, a progress report was sent to the PADEP that summarized the work done to date.
- Terry passed around a summary sheet of the study, including some estimates of existing waste streams
  - There was a lot of discussion around the estimated amounts of organic wastes from different sectors, specifically questions regarding the soiled paper estimates and the residential yard/wood waste numbers
  - Another question regarded the commercial organic waste breakdown. More clarity was asked regarding the 43% number of “other commercial sources”.
  - Terry mentioned he could share some of the background data that made up these tables, which might answer some of these questions more directly.
- Scott updated the group that the spring trash waste sort is currently underway, and a recycling waste sort was completed last month. A second waste sort will be conducted in the fall.
- These sorts could help firm up some of the projections of waste breakdowns in the city.
- Next Terry passed around a map of the regional facilities for yard waste and food waste that were contacted for this study. About 30 yard waste facilities and 14 food waste facilities were responsive.

- The response indicated that most facilities were maxed out on capacity (80-100% used) and did not have plans for expansion and much of their capacity was reserved for local municipalities. Even within this survey there was a very limited marketplace for food waste, opposed to leave and yard waste. PWD's plants are currently the largest opportunity for food waste disposal in the region.
- For the next part of the study, Terry will take a closer look at the Fairmount Park facility for expansion opportunities for additional yard waste and food waste composting. They would need additional resources however for any expansion.
- A brief discussion broke out on the technical mechanics of food waste composting, or what is the ideal recipe for mixing food and yard waste into compost.
- Next, a brief discussion on NYC's efforts was had. Waste management is having difficulty sourcing food waste; they are more expensive than other composting facilities in the region. Waste management also does not collect refuse in NYC.
- NYC's residential collection efforts has expanded to 500k households, but can cost over \$1,000/ton for collection as they only end up with 1-2 tons per truck.
- Additional potential sites for future composting opportunities in Philadelphia were explored:
  - A site near the north entrance of the Navy Yard
  - A site near Bartram's Gardens (owned by PIDC)
  - A site up on Krewstown Road
- Terry will look into these sites with assistance from Marisa and Nic
- Beyond that, Terry is finishing up the re-scoping of the study. He is hoping to have a finished report by the end of the calendar year.

**Concluding Remarks:**

- Marc mentioned that he has been meeting with the PADEP regarding the Fairmount Park facility
  - He had a good meeting with the Norristown division
  - Fairmount is moving toward a capture permit
  - DEP has stated they are fine with this move as long as there are no odor/vector complaints.

**Next month's meeting will be March 14<sup>th</sup> from 9:00-10:00 AM.** We will now meet on Tuesdays the week before the SWRAC meeting to work with a conflicting meeting. It will be held at PWD offices located at 1101 Market Street, on the 3<sup>rd</sup> floor (Conference Room 3A). [Meeting notes addition, this meeting was canceled by snow day]

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** March 23, 2017

**ATTENDEES:**

SWRAC Members

Michelle Feldman, Keep Philadelphia Beautiful (co-chair)  
Fern Gookin, Revolution Recovery (co-chair)  
Robert Anderson, ReCommunity  
Paul Kohl, Water Dept.  
Denis Murphy, Commerce Dept.  
Scott McGrath, Streets Dept.  
Charles Raudenbush, Waste Management  
Jack Embick, Environmental Law  
Maurice Sampson, Clean Water Action  
Vivian Van Story, Community Land Trust  
Dominic McGraw, Office of Sustainability

Others Present

Sara King, U Penn  
Kathleen Grady, Temple  
Kate Bowdies, Citizen  
James Gill, Citizen

City Staff/Consultants

Denise Diorio McVeigh, Recycling Office/Recyclebank  
Everett Burgess, Recycling Office/Recyclebank  
Erin Cartwright, Recycling Office/Recyclebank  
Marisa Lau, Streets Dept./Recycling Office  
Jason Rossano, LevLane  
Eric Spector, LevLane  
Carlton Williams, Streets Dept.  
Faruq Scott, Streets Dept.  
Haley Jordan, MDO  
Nic Esposito, MDO  
LeAnne Harvey, Office of Sustainability  
Keith Warren, Streets Dept.  
Laura Cassidy, Prisons  
Tamika Davis, PHL

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**Call to order/introductions:**

The meeting was called to order by SWRAC co-chairs Fern Gookin and Michelle Feldman at approximately 3:05 p.m.

## **February Meeting Minutes:**

Meeting minutes from the February SWRAC meeting were approved by voice vote.

## **Informational Items and Announcements:**

- *Solid Waste plan (M.Lau)* – Solid waste plan will be sent to DEP this week.
- *Upcoming Streets Department Events (M. Lau and M. Feldman)* - The Mayor's Kick-off event at Hunting Park was held on 3/8, and the PMBC Block Captain Rally will be on 3/25. The 10<sup>th</sup> annual Spring Cleanup will take place on 4/8. Household hazardous waste events also start in April.
- *Recyclebank Green Schools results (E.Burgess)* – 2017 was the biggest year yet for the Green Schools program. 17 of the Philadelphia school projects were fully funded, and all were funded over 85%. 22 schools will receive a combined total of \$46,934, a record for one year. Details about the check ceremonies coming soon.
- *KPB update (M.Feldman)* – KPB's 2016 annual report has been released, and two interns have recently joined the team to support communications and social media.

## **Organics Subcommittee Report (P. Kohl):**

March meeting was cancelled due to snow.

## **Zero Waste Partnership presentations**

After an introduction from Commissioner Williams, Eric Spector of LevLane gave a presentation on the Zero Waste Partnership Program under development by the Streets Dept. The three program tracks (for business and industry, community-based organizations (CBOs), and residents) will incentivize waste reduction behaviors and promote methods of diversion. New partnerships, grants, and education and engagement (offered by Recyclebank) will be at the core of this program. LevLane is integrating a zero waste message into the upcoming rally and cleanup, and will make messaging and branding consistent across all platforms, programs, and events. The new tagline, "Zero starts with one," was chosen in part for the flexibility it offered; new ads are planned for digital, transit, radio and social media. Mr. Spector showed a preview of the new Litter Index and website. The website will have information on every block in the city and connect residents to block-specific resources in order to encourage people to take action.

## **Questions:**

- Can the public edit the Litter Index website? [They will not be able to edit the information when the website goes live; perhaps in a future iteration.]

- Are hospitals considered eligible for the partnership program? If not, why not? [Hospitals, universities, and similar large institutions can become partners. Although the program categories are still being defined, the goal is to be inclusive.]

Comments:

- Different types of diversion should be prioritized; for example, organizations like Philabundance that do food recovery serve a more important need than composting. More emphasis on waste minimization is needed to get to zero waste.
- Consider making recycling contamination one of the metrics to measure the success of outreach efforts.
- More explanation is needed of what the business/industry category includes; different commercial sectors have very different waste streams and will need a tailored approach in outreach and education.
- Although the City aims to reach zero waste by 2035, it has to become litter-free much sooner than that.
- Zero waste should make the connection between cleaning up our neighborhoods and promoting safe and healthy environments; there is clear overlap with Vision Zero here.

Next, Denise Diorio- McVeigh of Recyclebank presented a new strategy to support Philadelphia’s zero waste goal. Recyclebank sees residents as the building blocks of this initiative, being both members of the Philadelphia workforce and community organizations. Keeping people engaged and promoting education (by teaching what zero waste is and steps to get closer to zero, and why it’s important) will remain the program focus, with rewards used to reinforce and incentivize zero waste practices. Building on this core program, customized features will include a new digital user experience for Philadelphia members with educational content focused on localized zero waste information.

Questions:

- Could “Resident” category be changed to “Individual” to include the 200,000 daily commuters to Philadelphia?
- Would it be possible to award points to residents for not having plastic bags in their recycling? Also include good behaviors like bringing reusable bags to shopping.

Comments:

- Presentations are using the terms “corporate/commercial/business” interchangeably; specify what each terms means other than “not community” and be consistent in how groups are referred to. The commercial sector is varied; for example, large and small businesses will need to be approached differently.

**Group discussions and reports**

The SWRAC formed two work groups for the remainder of the meeting to discuss the Zero Waste Partnership program and a Zero Waste definition and diversion framework.

The Partnership group discussed:

- Is each CBO grant cycle themed? Potential themes could first be based on barriers to litter prevention and recycling participation that have been identified by communities.
- Award criteria and reporting requirements
- Funding tiers and grant sizes
- Organizational partners to help facilitate grant applications, project implementation, and reporting

The Definition and Framework group discussed:

- How should we be defining zero waste? Is it an aspirational goal? Why can't zero actually mean zero? We can debate which policies should be adopted in order to achieve zero waste, but the definition may not be debatable.
- We are unable to anticipate what new technologies will develop over the next decades to aid in reaching zero waste, making long-term goal setting more difficult.
- Independent haulers are already incentivized to minimize waste and maximize recycling; how can you build on this?
- Suggestions for which specialized processors to contact for key data about the Philadelphia waste stream.
- A draft framework prepared by the Recycling Office (zero waste matrix) showing materials that will be counted toward the City's diversion rate; the matrix includes both processes and materials. Matrix categories need to be defined.

**Adjournment:** The meeting was adjourned at approximately 4:50 pm.

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** April 27, 2017

**ATTENDEES:**

SWRAC Members

Michelle Feldman, Keep Philadelphia Beautiful (co-chair)

Fern Gookin, Revolution Recovery (co-chair)

Robert Anderson, Curb My Clutter

Paul Kohl, Water Dept.

Charles Raudenbush, Waste Management

Jack Embick, Environmental Law

Vivian Van Story, Community Land Trust

Dominic McGraw, Office of Sustainability

Others Present

Kate Bowdies, Philabundance

Amy Cornelius, Citizen

City Staff/Consultants

Erin Cartwright, Recycling Office/Recyclebank

Marisa Lau, Streets Dept./Recycling Office

Eric Spector, LevLane

Haley Jordan, MDO

Nic Esposito, MDO

LeAnne Harvey, Office of Sustainability

Laura Cassidy, Prisons

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**Call to order/introductions:**

The meeting was called to order by SWRAC co-chairs Fern Gookin and Michelle Feldman at approximately 3:10 p.m.

**March Meeting Minutes:**

Meeting minutes from the March SWRAC meeting were approved by voice vote (Embick move, Kohl 2<sup>nd</sup>).

**Informational Items and Announcements:**

- M.Lau sent the revised draft of the solid waste plan to DEP in early April; they have 30 days to provide comments.
- The 10<sup>th</sup> Philly Spring Cleanup took place on 4/8. The Streets Dept. had 20,000+ volunteers and 800+ registered projects. 650,000 lbs of trash and 10,000 lbs of recycling were collected. An additional 200,000 lbs of yard waste for recycling were

collected as well, and community drop-offs for spring yard waste were also organized by the Department on Sat 4/22. For context, PRO will provide tonnages for past Spring Cleanups to the SWRAC.

- M. Feldman announced that a sign-up sheet with potential dates to volunteer for the Phillies Red Goes Green program is being circulated; she will submit an application for the SWRAC to volunteer at a game this season.
- C. Raudenbush shared that there is a bill (SB 646) before the State Senate to reauthorize the Act 101 recycling fee and remove the sunset date. It has bipartisan sponsorship.
- N. Esposito added that a bill prohibiting municipalities from instituting plastic bag bans (HB 1071) has been introduced in the state legislature.
- R. Anderson gave his final update from ReCommunity. The City was paid for its recyclables in April, but a recent drop in recovered fiber prices means that this will only be temporary.
- M. Feldman reported that:
  - KPB school partnership presentations are wrapping up for the year (2,000+ students received workshops)
  - A 3<sup>rd</sup> round of KPB microgrants will focus on cigarette litter (grantees will be required to recycle these through Terracycle)
  - KPB, United Blue, and the Water Dept. will hold a cleanup at Penn Treaty Park during Love Your Park week. Litter collected will become part of an art project on display at an upcoming exhibition at the Chemical Heritage Foundation. Exhibition opening is on June 17; more details to come.

#### **Organics Subcommittee Report (P. Kohl):**

The subcommittee received several project updates:

- *Prisons* - Construction on the expansion to the composting facility is moving forward, which will double the number of existing bays for composting. The expansion will allow Prisons to compost food waste from all of its facilities.
- *Parks* - Parks has submitted paperwork to PADEP to become a captive facility; this would allow Parks to compost food waste from any city facility along with yard waste. They are currently waiting for a letter of notification. The City is also looking for satellite locations for additional composting facilities and a space to conduct a pilot program that may result in an acceptable permitting process for other composting facilities.
- *MDO* - The Zero Waste and Litter Cabinet data intern, Haley Jordan, described a new waste audit program under development for municipal and commercial buildings. She has been developing new digital tools for the waste audit, which will help to track the city-wide waste diversion rate.

Other updates came from Streets, the EPA regional office, and PWD:

- The solid waste plan has been submitted to PADEP for comments;
- The EPA has given out several municipal grants recently to expand composting programs, or allow yard waste facilities to begin composting food waste;
- The PWD Energy team is working on an RFI for food waste co-digestion; and
- Lastly, the subcommittee heard about ongoing efforts to legislate a ban on organic waste in landfills in NY and MD. Streets is now working to revise City regulations banning food waste from dumpsters.

### **Group discussions and reports**

The SWRAC formed two working groups for the remainder of the meeting to further develop the Zero Waste Partnership program, and to discuss how to track diversion for zero waste. Reports were given at the end of the meeting.

The Partnership group focused on the business membership tier. The main questions posed were: (1) what incentives would be offered to businesses who participate? (2) what actions would businesses have to undertake to earn points towards receiving those incentives?

A number of possible incentives were discussed, including tax credits or discounts on utility bills. Actions for businesses to take to earn points towards being a Zero Waste Partner could include completing a commercial recycling plan and waste audit, eliminating use of single-use disposables such as plastic bags, or organizing regular corridor block cleanups and maintaining street plantings. More thought is necessary to develop a verification process for self-reported actions and activities.

The Diversion Rate group reviewed an updated zero waste matrix that will be used to track City-wide diversion, and the zero waste definition, including policy guidelines. Their feedback will be incorporated into the documents by the next meeting. Key comments received were:

- Hazardous materials from C&D should not be included in the diversion rate. However, these - and similar categories like medical waste - should be tracked and included in City disposal figures.
- For regulated-disposal materials, try to avoid having generators report twice. Can these tonnages be sourced from other databases?
- Philabundance will send write-up of how they track food recovery and waste in their organization.
- Track mail-in recycling programs like Terracycle.

**Adjournment:** The meeting was adjourned at approximately 4:40 pm.

**MEETING NOTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC),  
ORGANICS RECYCLING SUBCOMMITTEE

**DATE:** April 18, 2017

**Attendees:**

Adam Hendricks, PWD  
Emily Hill, PWD  
Paul Kohl, PWD  
Allison Starr, PWD  
Fern Gookin, Revolution Recovery  
Mike Giuranna, US EPA Region 3  
Laura Cassidy, Philadelphia Prisons System  
Haley Jordan, MDO  
Marisa Lau, Streets  
Marc Wilken, Parks and Rec

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The meeting was called to order at approximately 9:15 a.m. The meeting started with introductions and updates from the group.

**Prisons Update**

- Laura Cassidy gave the group an update on the prisons composting facility.
- The expansion project finally received funding codes, so construction will be moving forward.
- They will be expanding by adding an additional 8 larger bays for composting (4 back to back bins). This is in addition to their existing 7 bays.
- It is hoped that this will increase the amount of food waste they can compost from the current 2 prison facilities to all 6 total facilities, or from about 2,000 prisoners to 7,000 prisoners. When composting started the prison population, total, was at about 10,000. Currently they have calculated that each prisoner generates 1.4 lbs. of food waste per day.
- Laura also noted that their process has not had any odor or vector issues at the facility. Her biggest issue is with cleaning containers during the winter, when temperatures drop and water lines freeze. She needs to keep these containers clean to control odors and send clean bins back.
- She is also thinking about building a greenhouse to facilitate food waste transfer bin cleaning. It could be heated by the compost piles, which must have an interior temperature of 132 °F, and she has measured a high of 168 °F. Paul and Laura spoke later about the use of heat pump technology to utilize the heat source.

**Parks Update**

- Marc Wilken mentioned that Parks has submitted paperwork to PADEP to become a captive facility that would be able to compost food waste from any city facility along with yard waste. He is currently waiting for a letter of notification.
- Marc has had meetings with the PADEP already where they have expressed a general approval of the change, so the paperwork is expected to be a formality. This was especially poignant since his facility will be composting the NFL draft food waste. Marc was working directly with the Regional office of DEP (Norristown).

- The city is also looking for satellite locations for additional composting facilities and a space to conduct a pilot program that may result in an acceptable permitting process for other composting facilities.
- Marc also mentioned that he heard the Streets Department (Carlton Williams at a PPR and Streets meeting) mention they are working on another feasibility study for green/yard waste composting. It was unclear if this is different from the organic recycling feasibility study currently underway.

#### **Zero Waste/Litter Office Update**

- Haley Jordan is the new intern at the Zero Waste and Litter Office, working with Nic Esposito.
- She is currently working on a digital waste audit form, for use by municipal and commercial buildings, and a calculator for waste diversion.
- The audit form is to be used by building managers, it will likely be tested out first by municipally owned buildings.
- She is also working on building out a database of how much waste (and what kind) is generated in the city.
- The purpose of this work is to start to educate certain sectors of our economy about the magnitude of their waste stream and begin to education them on way to reduce and properly divert it.

#### **Streets Update**

- Marisa Lau stated that the Act 101 plan has been submitted to the state. They are currently waiting for comments back, which are expected to be in by the May SWRAC meeting.
- After the state's comments are reviewed, the next step is to send the plan to city council.

#### **EPA Update**

- Mike Giuranna briefly discussed a few grants the EPA has recently given out.
- One was to Prince George's County to expand their composting program. They want to turn their windrows into aerated piles, which will decrease the time to produce compost from about 8 months to 8 weeks. This will greatly increase capacity for them. The grant was \$20k.
- Another grant (\$10k) went to Blair County for them to get permitting and paperwork to start to compost food waste at their existing yard waste compost facility.
- Other similar grants went to West Chester and Easton.

#### **PWD Update**

- Emily Hill spoke about the energy team's work on a RFI (request for information) for food waste co-digestion. The RFI is still being worked on internally but the intent is to discern how much interest exist in preprocessing food waste to an acceptable standard for wet AD.

#### **Concluding Remarks:**

- Paul mentioned some regulatory updates
  - The NY State Governor is looking into a bill to ban organic wastes from landfills.
  - Maryland has put out an exploratory bill for a similar ban.
  - The American Biogas Council has put together a helpful update on existing legislation: <https://www.americanbiogascouncil.org/pdf/ABC%20Organics%20Recycling%20Policy%20Fact%20Sheet.pdf>.

- Streets is also working on overhauling their regulations to address the dumpster bill revisions, and are specifically working on Municipal and Commercial regulations.

**Next month's meeting will be May 16<sup>th</sup> from 9:00-10:00 AM.** It will be held at PWD offices located at 1101 Market Street, on the 3<sup>rd</sup> floor (Conference Room 3A).

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** May 25, 2017

**ATTENDEES:**

SWRAC Members

Fern Gookin, Revolution Recovery (co-chair)  
Denis Murphy, Commerce Dept.  
Scott McGrath, Streets Dept.  
Robert Anderson, Curb My Clutter  
Charles Raudenbush, Waste Management  
Jack Embick, Environmental Law

Others Present

Sara King, Penn

City Staff/Consultants

Denise Diorio-McVeigh, Recyclebank  
Erin Cartwright, Recycling Office/Recyclebank  
Marisa Lau, Streets Dept./Recycling Office  
Keith Warren, Streets Dept.  
Jason Rossano, LevLane  
Eric Spector, LevLane  
Haley Jordan, MDO  
Nic Esposito, MDO  
LeAnne Harvey, Office of Sustainability  
Laura Cassidy, Prisons  
Maria Vamvakiadou, Streets Dept.

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**Call to order/introductions:**

The meeting was called to order by SWRAC co-chair Fern Gookin at 3:05pm.

**April Meeting Minutes:**

Meeting minutes from the April SWRAC meeting were approved by voice vote (Raudenbush move, Anderson 2<sup>nd</sup>). Staff will check whether Sal Iadonisi should be included on the April attendees list.

**Organics Subcommittee Report (P. Kohl):**

No subcommittee report was given as P. Kohl was unable to attend due to an unexpected conflict.

## Informational Items and Announcements:

- M.Lau said DEP comments on the draft plan had been received and need to be addressed. S. McGrath added that legal representation for the City and PADEP will be able to assist.
- M.Lau also reported that door-to-door recycling outreach to multifamily properties with City collection, and to commercial properties, has been underway for more than a month now. Canvassers will expand to single-family properties in neighborhoods with low diversion rates. Outreach will continue through the fall, but project results will be periodically shared with the SWRAC before then.
- A sign-up sheet for Phillies Red Goes Green is circulating. The SWRAC will be volunteering for a game at 7:00pm on Sept 12. Come out to the game and help pick up recyclables!
- N. Esposito recapped this month's Zero Waste and Litter Cabinet meeting, which focused on enforcement. Thirty-one proposals were presented to improve the City's ability to enforce existing laws on the books and strengthen regulations for commercial waste management. Proposals included requiring haulers to report tonnages to the City; implementing a coordinated commercial system similar to franchise zoning; and creating dumpster free streets.
- N. Esposito briefly mentioned a cooking oil recycling project initiated by a group of Southeast Asian immigrants in Philadelphia.
- F. Gookin announced that the co-chairs and Recycling Office will have recommendations later this summer for changes to SWRAC organization and governance. The full Committee will start a discussion this summer, and vote on whether to adopt these changes in the fall. Prospective changes could include creating membership requirements for attendance, having everyone participate in a subcommittee, and reducing the number of general meetings to 6 per year.
- M. Lau made KPB announcements at M. Feldman's request:
  - Link to the Chemical Heritage Foundation "Things Fall Apart" exhibit opening on June 17: <http://bit.ly/2q4Fi37>
  - KPB's next two cleanups with United by Blue & the Water Dept will take place in July and August. The July event will take place at Graffiti Pier, and the August event will take place at Little Tincum. (More details about the August event to come, including a special giveaway).
  - Applications for KPB's part-time position will be accepted through June 2. Here's the job description: <http://bit.ly/2r1xyRa>. If you know an interested candidate please have him or her email Michelle Feldman.

## **Group discussions and reports**

The SWRAC formed two working groups for the remainder of the meeting to further develop the Zero Waste Partnership program, and to discuss how to track diversion for zero waste. Reports were given at the end of the meeting.

Outreach Coordinator Erin Cartwright updated the Partnerships group on Recyclebank's new rewards, technology, education, and engagement upgrades that will be ready for testing mid-summer. The full rollout of the rebranded "Waste Watchers" program is expected this fall. The group brainstormed ideas for the residential and business Waste Watchers initiative:

*Residential - geo-specific check-ins on new app; educational video completion; household-specific curbside diversion in later phases*

*Business – Branded reusable cups/mugs/bags for which participating residents receive a discount at partner businesses; sticker/social media badges to identify and promote zero waste businesses; customize outreach strategies for different types and sizes of businesses*

The Diversion Rate group reviewed and approved the final draft of the zero waste policy objective, diversion matrix, and diversion methodology to be presented to the ZWL in early June. Marisa Lau and Haley Jordan will continue to work on defining the categories of materials and processes in the diversion matrix prior to the June Cabinet meeting. The group also discussed strategic issues related to implementation, including how to collect the data, how to organize/use the data once received, and staffing needs for collection and analysis on an annual basis.

**Adjournment:** The meeting was adjourned at approximately 4:50 pm.

**MEETING NOTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC),  
ORGANICS RECYCLING SUBCOMMITTEE

**DATE:** May 16, 2017

**Attendees:**

Adam Hendricks, PWD

Paul Kohl, PWD

Michelle Feldman, Keep Philadelphia Beautiful

Mike Giuranna, US EPA Region 3

Marisa Lau, Streets

Scott McGrath, Streets

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The meeting was called to order at approximately 9:05 a.m. The meeting started with introductions and updates from the group.

- The meeting notes from the April meeting were distributed to the group. There were no immediate comments.

Updates from Recycling Office:

- Marisa updated the group on the Act 101 plan. It is still with DEP and they have not sent comments back. It is likely DEP will extend the comment period an extra 30 days, and thus comments should be back for the June SWRAC meeting.
- Marisa mentioned that Max Blaustein, the Nursery Manager for Parks and Rec, is interested in finding a way to use chipped Christmas trees for sustainable potting soil. She wanted to know if anyone in the group had advice on composting Christmas trees. Last year Streets collected about 200-300 tons of trees at drop-off locations, with a cost of about \$30/ton.
- It was also mentioned that Waste Watchers have been very useful for generating clean source separated organics for recycling. The recent NFL draft was a good example.

Update on Feasibility Study:

- The scope of work for the feasibility study is being modified to focus on early to mid-term actions to facilitate organics recycling. It will also include longer term items, but focus is shifting away from curbside residential collection to other options.
- The feasibility study will include some desktop analysis of how the Fairmount Park facility could be better utilized (improved or expanded).
- Scott mentioned Mike Carroll is interesting in having both PWD and Streets collaborating to work on organics recycling. He wants to increase capacity at Fairmount Park, use PWD for organics recycling, and focus on CDC community groups to achieve food waste diversion.
- The feasibility study should be completed by the end of the summer.

Other Streets Updates:

- Streets is also looking at microgrants, styled after Keep Philadelphia Beautiful grants and the Commerce Department's Storefront Improvement Program, for community composting initiatives.

- Streets is considering refining their disposal RFP to include alternative pathways for organics. The contract is up in 2019, so it will need to be rebid in 2018, but RFP drafting will begin sooner (this summer).
- Streets is getting 25 CNG trash trucks with help from a CMAQ and AFID grant. The grants will cover the cost difference between a regular truck and a CNG truck. PGW is building a CNG facility near PWD's northeast water pollution control plant. PGW is putting together an RFP for this facility and should be posting it out to bid in summer 2017. The RFP will include the provisions for RNG (renewable compressed natural gas) as this was part of the grant proposal. The RNG is to be supplied on the open market.

#### Regulations Update:

- Meetings are being scheduled with L&I's Right of Way Unit, and dumpster permitting, to get input for Streets Regulation changes. Also, need to discuss commercial recycling plan requirements with them.
- Streets wants to also take up revising the hauler legislation, to comply with state law. They must get city council on board with changes.

#### State Legislation Update:

- Paul stated that the Pennsylvania Biomass to Energy Association (PBEA) is pursuing organics recycling legislation in PA. They are working with American Biogas Council (ABC) and possibly the Harvard School of Law (Food Law and Policy Clinic). The subcommittee added that Keep PA beautiful and PROP might be interested in contribution to such an effort.
- There is an existing landfill ban on yard and lawn waste currently at the state level.
- There is another bill in the state legislature (Senate Bill 646) that would amend the Act 101 legislation to eliminate the sunset date on the recycling fees, making the fees a permanent fixture.

**Next month's meeting will be cancelled. We will meet next on July 18<sup>th</sup> from 9:00-10:00 AM.** It will be held at PWD offices located at 1101 Market Street, in a conference room TBD.

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** June 22, 2017

**ATTENDEES:**

SWRAC Members

Fern Gookin, Revolution Recovery (co-chair)  
Michelle Feldman, Keep Philadelphia Beautiful (co-chair)  
Dominic McGraw, Office of Sustainability  
Vivian Van Story, Community Land Trust  
Maurice Sampson, Clean Water Action

Others Present

Sara King, Penn  
Mike Dougherty, Wheelabrator  
Amy Cornelius, Citizen  
Logan Welde, Clean Air Council

City Staff/Consultants

Denise Diorio-McVeigh, Recyclebank  
Erin Cartwright, Recycling Office/Recyclebank  
Everett Burgess, Recycling Office/Recyclebank  
Marisa Lau, Streets Dept/Recycling Office  
Haley Jordan, MDO  
Nic Esposito, MDO  
Laura Cassidy, Prisons  
Daniel Lawson, Parks and Rec

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**Call to order/introductions:**

The meeting was called to order by SWRAC co-chairs Fern Gookin and Michelle Feldman at 3:10pm.

**May Meeting Minutes:**

Meeting minutes from the May SWRAC meeting were approved by voice vote. Denise Diorio-McVeigh will be added to the attendee list.

**Informational Items and Announcements:**

- M. Lau reported that the Streets Dept and PADEP have come to an agreement on how to address comments on the City's draft plan. The City will submit the final draft plan this summer.

- M. Lau gave an update on recycling outreach activities over the last month. PRO helped provide recycling training to Prisons managerial staff as part of a renewed effort to increase diversion. Prisons is currently recycling 300 tons per year and recently obtained a new recycling truck. PRO also sponsored a breast cancer awareness walk called the Sista Strut in its inaugural year in Philadelphia. SWEEP tabled for PRO at the finish line.
  - M. Sampson asked for clarification on the current strategy for promotional advertising, including the expected results of these campaigns. M. Lau noted that the recycling advertisements released this spring were planned as part of a larger campaign this year, differing from years past. N. Esposito added that the larger campaign has helped prime the public to receive information about new zero waste and litter free policies and programs.
  - The online registry of drop-off locations for plastic film recycling on the Streets website is out of date. L. Welde called locations to confirm and found at least thirty that do not offering plastic film recycling. He also noted that those locations that do offer recycling should be checked to ascertain whether materials actually get recycled.
- N. Esposito thanked the SWRAC for their hard work over the last few months. He announced that the June meeting of the Zero Waste and Litter Cabinet went well, and all recommended actions for waste reduction and diversion were accepted. According to the current timeline the action plan will be made public in early August; progress reports will follow annually in September.
- M. Feldman announced that the Mayor’s Office will conduct a Government and Advocacy 101 training at the SWRAC meeting next month. In August, a planning meeting for the SWRAC focused on organizational governance will be held instead of the general meeting; please contact the co-chairs if you would like to participate. General SWRAC meetings will be every other month starting in September, to allow for meeting planning in between.
- F. Gookin announced that she will be part of a panel on the future of recycling and Act 101 held by the Pennsylvania Resources Council next Thursday in Newtown Square.

**Group activity and discussion**

A group activity was conducted to help develop the concept of a business zero waste partners program. The recommendations made will be taken into consideration by the Streets Department as it moves forward with program development.

A summary of the discussion is below; see the “ZWP Business SWRAC activity” document for more details:

- Use a simple and clear certification process similar to LEED program

- Businesses sign up or take a pledge to become a partner and are assigned a level (such as bronze, silver, gold) reflecting progress toward becoming zero waste. For example see B Corp, NYC food service inspections, San Francisco.
- Show business progress using benchmarks such as new City diversion rate (when calculated) or rate of change over time
- Prioritize getting businesses of all types and sizes to join
- Create equitable processes to enable all businesses to actively participate, and equally benefit from program incentives
- Sidebar discussion on how to encourage/discourage restaurants from using certain types of compostable tableware until more processing options are available in the area
- General consensus reached on the best way to structure program tiers; see the document entitled “ZWP Business SWRAC activity” for more details
- During program design, consider what staff resources will be available for tracking participation and communicating with businesses
- Vet language used to describe zero waste actions for clarity and accessibility
- Capitalize on existing connections with City businesses (such as Recyclebank rewards partners) to grow program
- Use program to build new connections between businesses and hyper local organizations (eg CDCs, RCOs, libraries, rec centers, schools)
- Outreach and program incentives
  - Have local purchasing organizations and business organizations promote program; also engage manufacturers
  - Promote with testimonials/case studies from actual businesses
  - Conduct outreach by leveraging sustainability trends in consumer buying
  - Reward participating businesses with City recognition and possibly tax credits or discounts on utility bills
  - Support organizations’ cleanup activities (like waterways cleanups) with specialized equipment loans from City

The group also discussed new policy initiatives that would encourage businesses to take additional zero waste actions:

- Codify the use of reusable containers in restaurants, similar to prescription pill bottle refills
- Create a City sustainable materials management / circular economy working group to engage the business community and grow the recycling industry in Philadelphia
- Educate consumers about e-waste processors and recycling services
- Develop new uses in Philadelphia for hard-to-recycle materials like cigarette butts

**Adjournment:** The meeting was adjourned at approximately 4:45 pm.

**MEETING MINUTES: City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)**

**DATE:** July 20, 2017

**ATTENDEES:**

SWRAC Members

Fern Gookin, Revolution Recovery (co-chair)  
Michelle Feldman, Keep Philadelphia Beautiful (co-chair)  
Dominic McGraw, Office of Sustainability  
Vivian Van Story, Community Land Trust  
Maurice Sampson, Clean Water Action  
Denis Murphy, Commerce Dept.  
Scott McGrath, Streets Dept.  
Robert Anderson, Curb My Clutter  
Paul Kohl, Water Dept.  
Charles Raudenbush, Waste Management  
Jack Embick, Environmental Law

Others Present

Sara King, Penn  
Amy Cornelius, Citizen  
Kathleen Grady, Temple  
Mattea Pechter, KPB  
James Gill, Citizen  
Lauren Howard, Stantec Consulting  
Lilly Freedman, Revolution Recovery

City Staff/Consultants

Erin Cartwright, Recycling Office/Recyclebank  
Everett Burgess, Recycling Office/Recyclebank  
Marisa Lau, Streets Dept/Recycling Office  
Crystal Jacobs Shipman, Streets Dept/Public Affairs  
Keith Warren, Streets Dept/Sanitation  
Haley Jordan, MDO  
Nic Esposito, MDO  
Laura Cassidy, Prisons  
Daniel Lawson, Parks and Rec  
Stephanie Marsh, MDO  
LeAnne Harvey, Office of Sustainability  
Sofia Guernica, Office of Sustainability  
Foster Hardiman, OIT

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**Call to order/introductions:**

The meeting was called to order by SWRAC co-chairs Fern Gookin and Michelle Feldman at 3:10pm.

### **June Meeting Minutes:**

Meeting minutes from the June SWRAC meeting were approved by voice vote.

### **Informational Items and Announcements:**

- M. Lau announced that after discussion between the Streets Dept. and Dept. of Environmental Protection, the City will submit a non-substantial plan revision this summer, and a substantial plan revision in 2019. This will allow the substantial revision to include information on the new waste disposal contracts (to begin July 1, 2019). Both plans will cover a 10-year period as is required.
  - J. Embick asked how the ruling by the PA Supreme Court upholding the environmental rights amendment will affect the final draft of the plan.
  - Streets replied that DEP has not addressed this issue in connection with the plan.
- S. McGrath - Streets will have access to new technology that will improve the department's ability to distribute, track, and collect data on recycling bins. Trucks will be installed with new RFID readers this fall, and the City will begin distributing bins with RFID chips embedded. The data obtained will allow Streets to better manage the City's bin inventory.
  - R. Anderson asked for the average number of bins distributed annually.  
[40,000-60,000]
  - A. Cornelius asked if the older bins could be retrofitted with this technology.  
[No.]
- N. Esposito invited the SWRAC to the official announcement of the Zero Waste & Litter Cabinet Action Plan on August 7th at 9:00am in City Hall. Any additional information / changes will be sent.
- F. Gookin & M. Feldman reminded everyone that the SWRAC is not meeting in August. However, look for details about a planning and governance meeting that will take place instead. All are welcome to attend to discuss the future of SWRAC.
  - P. Kohl reported on the July Organics Subcommittee meeting. At the meeting, Adam Hendricks updated the group on the state of the Request for Information (RFI) for pre-processed food waste (FW) released by PWD. PWD is using this RFI to collect information from parties that may be interested in collecting and pre-processing food waste, to deliver a clean food waste slurry to one of PWD's treatment plants for co-digestion with wastewater sludge. An RFI information session held on 07/06/2017 was attended by several members of the PWD staff, as well as industry professionals interested in responding. PWD is currently working on official responses to questions from both the information session and e-mail submissions. The RFI itself, along with any additional

documents, are posted on the web at the following location:

<http://www.phila.gov/rfp/Pages/default.aspx>.

- Adam clarified that PWD is currently interested in a vendor hauling and pre-processing food waste, which would then likely be stored at one of PWD's Water Pollution Control Plant (WPCP) facilities prior to mixing with the sludge feed into anaerobic digesters.
- Current food waste collection and pre-processing programs similar to the one outlined in the RFI were discussed by the group. These programs included those that are currently running in New York City and Los Angeles, as well as one in the RFI stage in Portland, Oregon.
- PWD will lead a presentation on some of the content of the RFI responses at the September Organics Subcommittee meeting.
- M.Lau and N. Esposito provided updates on the solid waste plan and ZWL action plan. See above.
- M. Giuranna informed the group that a \$20,000 EPA grant was given for organics disposal in Prince George County, Maryland. This allowed for the County to start a curbside organics collection system of food waste and yard waste, and build on other recent upgrades to the composting infrastructure in the region.
- M. Feldman introduced Mattea Pechter, who has just joined the KPB staff.
  - M. Feldman also updated SWRAC on:
    - Two upcoming KPB events in partnership with United by Blue and the Water Department: a cleanup at Heinz Refuge and a fall panel.
    - A \$20,000 Keep America Beautiful grant KPB received in partnership with the School District for a pre-K sustainability initiative at Pratt School.
    - KPB's 2017 cigarette litter micrograntees: Fishtown Neighbors Association, Mayfair CDC, People's Emergency Center, Southwest CDC, and Chinatown Development Corporation.
    - A summer photo project highlighting Philadelphians engaging in zero waste activities.

#### **Mayor's Policy Office advocacy training:**

Nandi O'Connor, Christina Hernandez, and Yuan Huang from the Mayor's Office of Policy, Legislation, and Intergovernmental Affairs provided a presentation to the SWRAC on the fundamentals of the City of Philadelphia government, and how citizens and groups can be effective policy advocates. The first part of the presentation focused on government:

- The three branches of City government and their respective functions were introduced. This structure is determined by the original City charter.

- MDO manages outward-facing or “operating” departments, while the new Office of the Chief Administrator manages inward-facing departments.
- City Council passes the City budget and can pass bills or resolutions by following a required process (hearings, committees, etc.)
- The Legal Dept. represents the City and City Council. There are multiple layers of municipal court, but no designated highest court like the PA Supreme Court.
- The City can hire lobbyists to represent its interests in state and federal legislation. An important piece of state legislation is the Sterling Act of 1932, which granted Philadelphia the power to impose taxes as a First Class city.

The second part of the presentation focused on advocacy:

- Trainers discussed the four types of public policy that can be implemented by the City, and the processes involved for each. These processes can seem archaic, due to restrictions created by the City charter.
- The four types are: Legislative Change, Charter Change, Executive Order, and Internal Policy Change.
- A key takeaway for the group was that policy objectives can help advocates determine which type of policy change to pursue.
- Stephanie Marsh, Senior Attorney was introduced and her contact information distributed if anyone has further questions about policy.

Questions:

- How long do Executive Orders stay in effect? [Until they are rescinded by another Mayor.]

Comments:

- A. Cornelius suggested that the SWRAC’s technical expertise can be better utilized to shape City policy on waste management and recycling. She added that communication with SWRAC members about upcoming departmental policy and program changes could be improved.
- M. Feldman noted that the upcoming work on committee by-laws and membership requirements will help better define the role of the SWRAC as a working body.
- M. Sampson asked for clarification about whether SWRAC members would be expected to give City Council testimony. P.Kohl pointed out that the committee is convened by the Streets Dept, and the Department has given testimony in the past.

Group activity:

A facilitated group activity was conducted for the remainder of the meeting, with a short debrief on the activity afterwards. Participants were divided into smaller groups, and each person was given a role to assume. The goal was to have members practice effective advocacy in support of or opposition to a bill increasing the minimum wage. In order to achieve their

assigned objectives, participants had to navigate the constraints of the governance system (by forming alliances with others, prioritizing certain meetings, making compromises, etc.) using the information they received earlier about the workings of City government.

**Adjournment:** The meeting was adjourned at approximately 4:45 pm.

DRAFT

**MEETING NOTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC),  
ORGANICS RECYCLING SUBCOMMITTEE

**DATE:** 07/18/2017

**Attendees:**

Adam Hendricks, PWD  
Marisa Lau, Streets  
Nic Esposito, MDO  
Tommy Thompson, PWD  
Mike Giuranna, US EPA  
Lilly Freedman, Revolution Recovery  
Fern Gookin, Revolution Recovery  
Chuck Raudenbush, Waste Management  
Sean McKelvey, PWD

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The meeting was called to order at approximately 9:10 a.m. The meeting started with introductions and updates from the group.

- The meeting notes from the May meeting were distributed to the group. There were no immediate comments.

Updates from Water Department:

- Adam updated the group on the state of the Request for Information (RFI) for pre-processed food waste (FW) put out by PWD. PWD is using this RFI to collect information from parties that may be interested in collecting and pre-processing food waste, to deliver a clean food waste slurry to one of PWD's treatment plants for co-digestion with wastewater sludge.
- An RFI information session was held on 07/06/2017 and was attended by several members of the PWD staff, as well as industry professionals interested in responding. PWD is currently working on official responses to questions from both the information session and e-mail submissions. The RFI itself, along with any additional documents, are posted on the web at the following location: <http://www.phila.gov/rfp/Pages/default.aspx>.
- A question was asked on the collection of food waste proposed in the RFI. Adam clarified that PWD is currently interested in a vendor hauling and pre-processing food waste, which would then likely be stored at one of PWD's Water Pollution Control Plant (WPCP) facilities prior to mixing with the sludge feed into anaerobic digesters.
- Current food waste collection and pre-processing programs that are similar to the one outlined in the RFI were discussed by the group. These programs included those that are currently running in New York City and Los Angeles, as well as one in the RFI stage in Portland, Oregon.
- PWD will lead a presentation on some of the content of the RFI responses at the September Organics Subcommittee meeting.

Update from Streets Department:

- Marisa updated the group on the state of the City of Philadelphia's Municipal Waste Management Plan (Act 101). Streets met with PADEP to address their comments received on the draft plan. In order to include information about the City's new waste disposal contracts in the 10-year management plan, it was decided that Streets will submit two plans to PADEP. The first will be submitted this summer as an update to the last non-substantial plan revision prepared by the City

in 2005. In 2019, Streets will submit a substantial plan revision containing information on the new contracts beginning July 1, 2019.

- Additionally, Marissa discussed the closings of landfills that accept city waste, which will take place over the next few years. Chuck noted that the Tullytown landfill has been closed and the Grows landfill is closing in 2018. A new Fairless Hills landfill will be open soon that will have capacity at least through 2030.

#### Update from Zero Waste and Litter:

- Nic indicated that the City's Zero Waste Plan is in the final stages, with no major revisions impending. On Thursday, Nic will meet with Mayor Kenney to brief him on the plan itself. A press conference will likely be held in the beginning of August to publically announce the initiative.
- Nic noted that an effective strategy was in place for the dissemination of information regarding the Zero Waste Plan to the public to ensure that people understand how they can participate.
- In answering questions, Nic clarified that the purpose of the Zero Waste Plan was to set overarching goals for the City, including possible legislative actions. The Plan includes macro steps that build a framework for incorporating all forms of diversion in relation to the waste we generate as a city to meet the zero-waste goal. The Plan includes annual progress updates in September.

#### Additional topics:

- Mike mentioned a \$20,000 EPA grant that was given for organics disposal in Prince George County, Maryland. This allowed for the County to start a curbside organics collection system of food waste and yard waste.
- A composting facility that services Prince George County has recently been upgraded to utilize air blowers to expedite the composting process. However, even with these upgrades the facility is currently at maximum capacity.

**The August meeting will be cancelled. We will meet next on September 19<sup>th</sup> from 9:00-10:00 AM.** It will be held at PWD offices located at 1101 Market Street, in the 6<sup>th</sup> floor conference room (06-0211).

**MEETING MINUTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

**DATE:** September 28, 2017

**ATTENDEES:**

SWRAC Members

Fern Gookin, Revolution Recovery (co-chair)  
Michelle Feldman, Keep Philadelphia Beautiful (co-chair)  
Robert Anderson, Curb My Clutter  
Jack Embick, Environmental Law  
Paul Kohl, Water Dept.  
Denis Murphy, Commerce Dept.  
Maurice Sampson, Clean Water Action

Others Present

Jenny Reeverts, eForce Recycling  
Jim Mack, eForce Recycling  
Don Lucy, Waste Management  
Christian Saveoz, Republic Services  
Sara King, Penn  
Amy Cornelius, Citizen

City Staff/Consultants

Erin Cartwright, Recycling Office/Recyclebank  
Denise Diorio-McVeigh, Recyclebank  
Marisa Lau, Streets Dept/Recycling Office  
Daniel Lawson, PPR  
Tiara Clark, PPR/PowerCorps  
Sofia Guernica, Office of Sustainability  
Foster Hardiman, OIT  
Tamika Davis, PHL  
Nic Esposito, MDO

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**Call to order/introductions:**

The meeting was called to order by SWRAC co-chairs Fern Gookin and Michelle Feldman at 3:00pm.

**July Meeting Minutes:**

Meeting minutes from the July SWRAC meeting were approved by voice vote.

## Streets Department Zero Waste Partnerships Update

- Commissioner Williams presented on the Streets new Zero Waste Partnership Program. Denise Diorio-McVeigh of Recyclebank discussed the residential component, Philacycle, which will replace the program formerly known as Philadelphia Recycling Rewards. The presentation will be circulated by email after the meeting.
  - Partnership programs are designed to introduce the concept of zero waste to residents, community-based organizations, and businesses
  - Business leaders in sustainability will be highlighted and recognized for their efforts
  - DEP grant funds for recycling performance will be reinvested in communities through a new grant program
  - Streets is looking to Commerce Dept grant program for ideas
  - Philacycle – overview of brand development and current state of the recycling rewards program
    - Existing members will become Philacyclers when the program launches
    - There will be expanded opportunities for residents to earn points
    - Re-branding will make it easier for residents to engage with the platform through multiple entry points (web, app, events, shopping)

## Organics Subcommittee Report

- Paul Kohl reported on the results of PWD's Request for information (RFI) for the collection and processing of food waste (FW) to be delivered to PWD's water pollution control plants. In total, PWD received 12 responses with 3 additional inquiries.
- Adam Hendricks of PWD presented on the responses at September's subcommittee meeting. Presentation slides and meeting notes were distributed to that group.
  - The responses varied in length and thoroughness. Additionally, there were some alternative proposals to what PWD had suggested in the RFI.
  - Sources of FW varied but most responses focused on industrial and institutional sources.
  - Most respondents indicated they would be able to scale up the amount of FW to be delivered to PWD by adding shifts or modules at the pre-processing facility.
  - Typical pre-treatment process was as follows: Mechanical separation, inert material removal, maceration/liquefaction, and grit removal
  - Key takeaways from RFI responses:
    - The responses were highly varied in both strategy and thoroughness
    - Most Respondents suggested that they would subcontract hauling
    - The FW characteristics were fairly consistent between Respondents

- The primary purpose of the RFI was to ascertain if the business strategy that PWD had in mind was viable. The responses to the RFI suggest that, aside from some minor details, that the business strategy was sound.
- It was reiterated that the City is always looking at its toolbox (e.g. anaerobic digesters, composting facility, etc.) to find ways to improve its capacity to take organic waste. For example, a proposal for a composting facility was submitted to the 2017 Bloomberg Philanthropies' Mayors Challenge this fall. How else can we encourage investment and change the way we think about food waste as a city?
- PWD may want to focus on types of food waste generators that are most beneficial for biogas production. The value of biogas can change dramatically when it is used as a fuel. Currently the driving factor of these operations is tipping fees, but that would change dramatically if the biogas was used for transportation fuel.

### **SWRAC August Planning Meeting Report**

- M. Lau, M. Feldman, and F. Gookin reported on the August 18<sup>th</sup> SWRAC planning meeting. Meeting notes will be circulated by email.
  - Proposed changes include: establishing bylaws and attendance requirements; changing schedule to alternate monthly general meetings; including more programming to help SWARC members be effective advocates
  - SWRAC members indicated that Executive Order 15-08 outlines the role of the SWARC. Would a new Executive Order be required to make these changes?
  - Not all attendees recalled seeing the planning meeting announcement sent on August 9<sup>th</sup>
  - Discussion postponed until SWRAC leadership and Streets Dept can discuss these considerations.
- Questions and comments on information received at this meeting so far:
  - A. Cornelius asked what the Commerce Dept is doing to support zero waste. Streets Dept answered that they will coordinate with Commerce on the business partnerships program.
  - M. Sampson indicated that the zero waste program is on the right track with the Zero Waste and Litter Cabinet, having come full circle from the City's early efforts to convene a interagency task force on diversion.
  - Group discussion on the potential impact of China's National Sword program. B. Anderson shared that China will be looking at the quality of materials (contamination must be < 1.5%) We need to develop new markets and take into account that the recycling industry will need 18-24 months to install new technology to meet these stricter standards.

## **PRO Update**

- M. Lau shared that the Streets Dept and its consultant continue to work on the non-substantial revision of the municipal solid waste plan to be submitted to DEP.
- She went over changes to the bin program. The department has ordered lids that will be made available to residents, based on the initial results of the ZWL study and survey. Lids will fit standard 22-gallon bins distributed by Streets, including older bins.
  - Starting in October, bins with RFID chips will be available, and residents will be required to register with their address at all distribution points. Program changes and technology upgrades (including new readers) will allow the department to better manage the bin inventory and reduce the amount spent on bins.
  - More information and a request form are available at:  
<http://www.philadelphiastreet.com/binrequest>

## **Zero Waste & Litter Cabinet Update**

- N. Esposito shared that municipal building waste audits will be underway before the end of the year, as detailed in the action plan.
- He explained that the Office of Sustainability's former Waste Watchers program is now under the Philacycle umbrella (the action plan references "Waste Watchers" but that name had already been trademarked).
- Higher-tier Philacyclers will have to attend an initial training, make presentations in their community, and volunteer at zero waste events.

## **Recyclebank Update**

- E. Cartwright announced that the Green Schools program is now accepting applications. A flier will be sent to the email list after the meeting. She pointed out that deadlines for this year are slightly different.
- M. Lau indicated that Recyclebank completed two additional projects in the last two months – a recreation center contest for facilities that received new recycling bins, and a joint (PARK)ing Day parklet. See photos at #reducereuserudbeckia.

## **PA State Budget Update**

- S. McGrath reported that the House has adopted a budget that would empty the recycling fund but the Senate does not support the bill.
- Continue to contact your representatives. Information provided by PROP will be sent to the email list.
- \$2 recycling fee still needs to be extended; a 3-year extension would be a compromise

- Members of the Environmental Resources Committee are calling for a “comprehensive” review of Act 101. Unclear what this would entail other than a broader focus on more than just disposal capacity.

#### **Informational Items and Announcements**

- Keep Philadelphia Beautiful, United By Blue and the Water Department are hosting a panel discussion at the Fairmount WaterWorks on Oct 25<sup>th</sup>. Additionally, KPB is hosting its last cleanup of the season with the Nature Conservancy and the Nationalities Service Center for Make a Difference Day on October 28<sup>th</sup>.
- Clean Water Action is honoring PA Attorney General Josh Shapiro with an environmental leadership award at its annual auction and party this year at Fairmount Water Works.
- SWRAC leadership will email minutes and additional follow up information from today’s meeting, as well as the next general session meeting date.

**Adjournment:** The meeting was adjourned at approximately 5:00 pm.

DRAFT

**MEETING NOTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC),  
ORGANICS RECYCLING SUBCOMMITTEE

**DATE:** 09/19/2017

**Attendees:**

Adam Hendricks, PWD  
Paul Kohl, PWD  
Emily Hill, PWD  
Marisa Lau, Streets  
Mike Giuranna, US EPA  
Chuck Raudenbush, Waste Management  
Michelle Feldman, Keep Philadelphia Beautiful  
Tim Bennett, Bennett Composting  
Sean McKelvey, PWD

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The meeting was called to order at approximately 9:15 a.m. The meeting started with introductions and updates from the group.

PWD's RFI for Food Waste Co-Digestion:

- Adam gave a presentation on the responses to the Request for Information (RFI) from the City for the collection and processing of food waste (FW) to be delivered to PWD's water pollution control plants (WPCPs). The slides from this presentation were distributed with these notes to the group.
- The presentation began with a list of Respondents, which will be published on the City's [Request for Proposals](#) website. The responses varied in length and thoroughness. Additionally, there were some alternative proposals to what PWD had suggested in the RFI.
- Paul brought up that the primary purpose of the RFI was to ascertain if the business strategy that PWD had in mind was viable. The responses to the RFI suggest that, aside from some minor details, that the business strategy was sound.
- The sources of FW varied by respondent. A few respondents suggested that residential collection of FW was feasible, while most focused on industrial and institutional sources. Most of the Respondents stated that they would subcontract hauling.
- Adam described the pre-treatment strategies given by Respondents:
  - Most Respondents suggested that they would be able to scale up the amount of FW slurry to be delivered to PWD easily by adding additional shifts or modules at the pre-processing facility.
  - The typical pre-treatment process was as follows: Mechanical separation, inert material removal, maceration/liquefaction, and grit removal
  - Some of the Respondents noted that they would like to take in municipal solid waste (MSW). The MSW stream would contain recyclable materials that could be valued by the pre-processor.
- Adam described the quality assurance (QA) strategies given by Respondents:
  - The main focus on QA was to source separate the FW prior to collection.
  - Upon reception at the pre-processing facility, each load would be visually inspected by the pre-processor. Any load that did not meet the requirements would be rejected and sent to the landfill.

- Tim asked how the subcontracts would be structured. Would the hauler build the relationship with FW generators, or would the pre-processing company? Adam responded that this was not made clear in the responses, but that it was something to consider more for a request for proposal (RFP) in the future.
- Paul noted that when East Bay Mud enters into an agreement with a new client, they do additional testing on the new client until they establish that they are a reputable supplier.
- Adam described the delivery strategies given by Respondents:
  - Respondents stated that they would use tanker trucks to deliver the pre-processed FW to PWD. The delivery schedule would be flexible, and typically 5-7 days/week
  - Many Respondents noted weekly and seasonal variability in the FW stream.
    - Many noted that the FW quantity was higher in the beginning of the week.
    - Tim noted that it varied by supplier, in his experience. A restaurant would likely produce more FW during the weekend, but a cafeteria for a workplace would generate most of its FW later in the week.
- Adam discussed responses to the Business Plan section of the RFI:
  - The minimum amount of FW necessary for the feasibility of the project varied between Respondents.
    - Many expressed either a minimum amount of tons/day or decentralized pre-processing units at FW generators.
    - Other Respondents expressed the need for a long-term contractual commitment by the City.
  - Respondents expressed ease with which they could scale-up production of a FW slurry by additional shifts or modules.
  - The fee structure varied between Respondents. Some suggested fees based on volume (\$/gal), by weight (\$/ton), or variations based on characteristics of the FW slurry (e.g. TS, VS, etc.).
- Adam gave the key takeaways from RFI responses:
  - The responses were highly varied in both strategy and thoroughness.
  - Most Respondents suggested that they would subcontract hauling. Adam noted that this was a good way for Respondents to meet anticipated Minority and Women Owned Businesses Requirements.
  - The FW characteristics were fairly consistent between Respondents.
- A discussion of the overarching themes of the RFI responses took place between the subcommittee members.
  - Adam stated that this was the first step in the long process to posting an RFP. Tim asked how long would it typically take for an RFP to be posted.
    - Chuck suggested that the process may be expedited by the City contracts for waste disposal expiring at the end of fiscal year 2019.
    - Paul stated that any timeframe would be highly speculative, but would be affected by a variety of factors.
  - Paul mentioned that the value of biogas can change dramatically when it is used as a fuel. Currently the driving factor of these operations are tipping fees, but that would change dramatically if the biogas is used for transportation fuel.
  - Marisa asked Adam if the responses changed the way that PWD would be looking at an RFP. Adam responded that the RFI responses primarily clarified details of how the collection and pre-processing would work in practice. The responses also reinforced many of the ideas that PWD had prior to putting out the RFI.

- Paul noted that some of the Respondents expressed interest in taking over some of the wastewater treatment for the City. He noted that some of the potential RFP responses would likely propose these sorts of P3's. Chuck noted that there is some precedent for this, with Synagro overtaking operations at the Biosolids Recycling Center.
- Paul opened up discussion of how a process of a P3 would work to the group. The group briefly discussed opening up the discussion to the general body of SWRAC.
- Paul mentioned that both New York City and Los Angeles, which both have similar operations to the type that PWD is looking to undertake, are having trouble getting *enough* FW. Chuck noted that FW co-digestion and organics collection would likely look similar to how recycling was instituted – over a long period of time with strategy changing with time. Marisa noted that stepping up operations makes sense.
- Paul noted that the City is always looking at its toolbox (e.g. anaerobic digesters, composting facility, etc.) to find ways to improve.

**City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)  
MEETING MINUTES (DRAFT)**

**DATE:** November 30, 2017

**ATTENDEES:**

SWRAC Members

Fern Gookin, Revolution Recovery (co-chair)  
Michelle Feldman, Keep Philadelphia Beautiful (co-chair)  
Robert Anderson, Curb My Clutter  
Jack Embick, Environmental Law  
Sal Iadonisi, U.S. Recycling  
Scott McGrath, Streets Sanitation  
Charles Raudenbush, Waste Management  
Maurice Sampson, Clean Water Action  
Sara King, Penn

Others Present

Anthony Auliano, Republic Services  
James Capanna, Republic Services  
Frank Chimera, Republic Services  
Amy Cornelius, Citizen  
Blanche Helbling, Keep Philadelphia Beautiful  
Peter Karasik, Citizen  
Jim Mack, eForce Recycling  
Christian Saveoz, Republic Services  
Shraddha Sawant, eForce Recycling  
Steve Spinelli, Republic Services

City Staff/Consultants

Erin Cartwright, Recyclebank/Philacycle  
Everett Burgess, Recyclebank/Philacycle  
Marisa Lau, Streets/Recycling Office  
Sofia Guernica, Office of Sustainability  
Nic Esposito, MDO  
Haley Jordan, MDO  
Laura Cassidy, Prisons  
Faruq Scott, Streets Sanitation

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**Call to order/introductions**

The meeting was called to order by SWRAC co-chairs Fern Gookin and Michelle Feldman at 3:05 pm.

**September Meeting Minutes**

Meeting minutes from the September SWRAC meeting were approved by voice vote.

## **Organics Subcommittee Report**

P. Kohl was unable to attend the SWRAC meeting due to an unexpected conflict.

## **SWRAC Planning Meeting Report**

M. Feldman gave a brief overview of the planning meeting in October. Meeting notes can be emailed upon request. Sara King (Penn) helped the executive committee brainstorm ways for the ZWL to collect feedback from large institutions as the commercial building waste audit program develops, along with other program and policy changes for waste reduction and diversion. Large institutions will be eligible for the Streets Department's new business partnership program to launch in 2018.

S. King reiterated that a City-convened Meds and Eds stakeholder group would be useful; such a forum would also allow institutions with similar challenges to share best practices for zero waste with each other.

## **Philadelphia Recycling Office/Philacycle update**

M. Lau highlighted two outreach events since the last SWRAC meeting. Post-Landfill Action Network (PLAN) held the Students for Zero Waste conference at Temple University, which Nic Esposito presented at and Kathleen Grady helped organize. Ms. Lau encouraged others to attend the conference next year at Penn, especially if they had not been to a zero waste event previously. She also attended the airport's annual America Recycles Day event for the first time, and noted that a dedicated group of airport employees provided recycling education to their peers. It would be a great model for other City agencies and departments to follow.

Next, E. Cartwright gave an update on Philacycle. The program launched, held a Captains training, and diverted waste at the Philadelphia Marathon in November. 31 people attended the training, which will be offered quarterly. Captains have access to different rewards and can earn points for participating in zero waste activities. The Philadelphia Marathon was a successful volunteer event, but there were lessons learned for how to run the event next year. Notably, vendors were not given guidelines on best practices for zero waste, making it difficult to predict what kind of materials would need to be diverted. M. Lau added that other zero waste events in Philly would not involve as much planning and coordination with the Sanitation Division as the marathon, and would be less challenging operationally overall.

A. Cornelius reported that her organization, Bella Vista Neighbors Association, and other groups such as Queen Village Neighbors Association have complaints about the bin partner program. M. Lau noted that there have been no deliveries this fall due to operational constraints, and deliveries will start tomorrow, Dec 1. Although the Department has tried to schedule deliveries several times this fall, in each case a different City operation took precedence and there were no trucks available. The Recycling Office will try to coordinate more with Sanitation Operations to reduce miscommunication to the bin partners.

A. Cornelius also asked for an update on the new BigBellys with foot pedals. S. McGrath reported that 275 new and rehabbed units total will be installed, primarily in Center City. Of these, 150 will be in

previously existing locations. Advertising will be installed on the units. Revenue will be used to pay for new equipment and cleaning services for the program. The installation period will continue into December.

S. McGrath and C. Raudenbush summarized the implications of the new PA budget for recycling. The budget that passed has no sunset fee for the disposal fee. However, the Governor is still able to reallocate funds from the Recycling Fund. The legislature is interested in revisiting Act 101 and modernizing the Act to better reflect solid waste management today. DEP can now open the recycling grant programs again in 2018-2019; there is \$75 million in the Recycling Fund.

- J. Embick added that taking money out of the Recycling Fund to reallocate to other budget items unrelated to recycling is clearly unconstitutional, and Pennsylvanians should not accept these transfers as the new norm.
- C. Raudenbush noted there has been pushback against consolidating the various smaller funds into a large fund.
- A. Cornelius asked who would be involved in creating new or revised legislation to replace Act 101. C. Raudenbush replied that this wasn't an imminent concern, but presumably environmental and advocacy groups would work together, as they did this past year. N. Esposito added that City lobbyists had advocated for the preservation of the Recycling Fund and would also be involved in any changes to Act 101.

#### **Zero Waste and Litter Cabinet update (N. Esposito)**

- Half of all Parks and Rec facilities now have outdoor recycling.
- 3 pieces of related legislation have been introduced in City Council. Councilman Henon introduced a bill that will allow vehicles involved in short dumping to be seized; Councilman Green introduced a bill to increase litter fines; and Council President Clarke introduced a bill that will require construction permits to identify waste haulers. L&I will also create a list of registered haulers that can be used when applying for a permit.
- The Litter Index is now 80% complete. Final data will be collected after December.
- Subcommittee updates on communications, behavioral science, and waste diversion and reduction:
  - CleanPHL.org has been expanded with an explanation of new zero waste and litter programs and serves as a central hub for related City resources; Philacycle has also launched.
  - The behavioral science subcommittee is awaiting the final results of the recycling bin study showing how improved access affects diversion rates, and how lids affect litter rates.
  - Despite the challenges noted earlier, the Marathon reached an 83% diversion rate through recycling and composting. The rate will increase when net donations are included.

- Municipal building waste audits were launched this month. All buildings will be required to complete an audit annually, with the option to report their diversion numbers. The City will develop a similar commercial building audit program; several questions were asked about it:
  - What commercial or other entities will be involved in the auditing process?
  - Will the audits require waste sorts and diversion weights to be reported? The municipal building audit asks for estimates based on containers and materials generated.
  - What information will be made available publically?

### **Greenworks update**

S. Guernica noted that the Office of Sustainability will release this year's Greenworks update as a magazine in late January.

### **Informational Items and Announcements**

- Keep Philadelphia Beautiful (M. Feldman)
  - KPB will reach over 4,500 students this calendar year through in-classroom presentations on litter and recycling, and has plans to add additional interactive elements to their workshops as well as tools / convening opportunities for teachers
  - KPB released their 4th annual Community Cleanup Resource Guide on America Recycles Day
  - KPB and the School District are about to open a new Head Start Agriculture and Environmental Center at Pratt School in North Philadelphia thanks to a \$20,000 grant from Lowe's and Keep America Beautiful
- C. Raudenbush asked about a bill introduced by PA Rep. Angel Cruz increasing fines for dumping tires in Philadelphia.
- B. Anderson reported that PA DEP held a press conference with AeroAggregates at the Navy Yard. He had brought a sample of foamed glass aggregate to the meeting, which was recently approved for use in PENNDOT projects and by other state transportation agencies. The material has been used for decades in Europe, but is not common in US construction projects. He suggested that Aero present at a future SWRAC meeting, and a tour of the facility be arranged.

**Adjournment:** The meeting was adjourned at approximately 4:30 pm.

**MEETING NOTES:** City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC),  
ORGANICS RECYCLING SUBCOMMITTEE

**DATE:** 11/14/2017

**Attendees:**

Adam Hendricks, PWD

Paul Kohl, PWD

Marisa Lau, Streets

Fern Gookin, Revolution Recovery

Mike Giuranna, US EPA

Laura Cassidy, Philadelphia Prisons

Sean McKelvey, PWD

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The meeting was called to order at approximately 9:15 a.m. The meeting started with introductions and updates from the group.

**PWD's RFI for Food Waste Co-Digestion:**

- Paul began by summarizing a presentation given to PWD executive staff on the status of the RFI responses. Several questions still need to be answered following that meeting:
  - o PWD needs to better assess the fiscal liability of accepting pre-processed food waste.
  - o A legal evaluation is needed to determine if the City can limit the source of the food waste to be within the city limits.
- As part of a conversation regarding taking waste to other facilities, Mike brought up the McGill composting facility in Virginia, which processes sewage sludge and food waste. They may be a good contact point for PWD.
- Paul mentioned that PA has recently closed the state border for trading renewable energy credits for solar.
  - o All existing contracts are grandfathered in, but any new contract must generate the renewable solar energy within the state borders.
  - o This suggests that there may be some legislative precedent for limiting food waste to that which is generated within the City.
- Mike mentioned the Carbone incinerator decision, where NJ attempted to prevent waste from crossing state lines into PA. The decision went all the way to the Supreme Court, where it was ruled that waste could be transported across state lines, and the state cannot prevent this from occurring. This concurs with City's position that there are legal precedents that prevents a state from prohibiting waste from crossing the state line.
- The group discussed that many composting facilities limit sources to those within 40 miles.
- Several strategies for limiting the food waste source to be within City limits were discussed:
  - o The possibility of having a variable pricing model based on source of the food waste was discussed.
  - o The use of existing city inspection practices could be a viable strategy for enforcing some rule within a possible RFP.
  - o A possible contractual provision that increases the required percentage of food waste sourced from within the City limits was discussed (i.e. allowing for revenue generating mass flow of organics to support the venture initially while ramping back once a more stable market has been established). PWD does not want to burden any enterprise with unnecessary market risk.

- Mike mentioned that Howard County, MD only takes waste from within the county limits. A similar provision in a possible RFP would likely require City Council approval.
- The overall evaluation of food waste sources was discussed.
  - An existing EPA inventory of food waste was discussed by Paul and Marisa, to determine waste generators in and around the city.
  - Within the City limits, there is more food waste that could be diverted than capacity for PWD to take it (i.e. PWD does not think it will take long for the market to become stable).
- Logistics of organics handling were discussed:
  - A new medallion would need to be developed for an organics dumpster.
  - L&I is currently undertaking a very large IT project.
  - The difficulty of handling organics prior to the startup of the pre-processing facility was discussed by Marisa and Paul.
    - Current regulations require food waste grinders (i.e. garbage disposals) to be used prior to sewer injection, composting or separate bins.
    - Food Waste Grinders are required within the health inspection of commercial food processing facilities.
  - NYC created a law for organics recycling. This law was interpreted by NYC to ramp up organics recycling enforcement over time, starting with the largest scale facilities.

#### Streets' update on the Organics Feasibility Study:

- Maris indicated that there is no news on organics feasibility study.
- The consultant assisting Streets is going to tour Synagro's Biosolids Recycling Center to investigate the possible use of the land for composting.
- The first draft of the feasibility study is expected early in 2018.

#### Additional Notes:

- Two events are taking place on Wednesday 11/15/2017:
  - Streets is launching the new Philacyle program.
  - Revolution Recovery is hosting its Trash Bash.
- The next meeting will be held in January.

**Appendix <**

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## Public Review and Comment Process

The City released the draft Plan for public review and comment on September 5, 2016. In addition to members of the SWRAC, the public was provided access to the Plan at five (5) libraries and via the City's website. Notice of availability of the draft Plan was published on two occasions in September 2016. The City allowed ninety (90) days from the second publication date of September 15, 2016 for receipt of public comments, and held a public meeting on September 22, 2016. Following are the comments which resulted from the review process along with responses from the City. Comments have been consolidated and paraphrased, as appropriate, to avoid repeating similar comments and to eliminate extraneous information not directly related to the content of the draft Plan.

**Comment:** Some typographical, formatting and other technical corrections, clarifications and updates were identified.

**Response:** *The document has been revised to reflect the suggested changes.*

**Comment:** It was requested that a list of regional recycling facilities be added to the Plan.

**Response:** *A new table has been added to Chapter 6 identifying materials recovery facilities that serve Philadelphia and southeastern Pennsylvania.*

**Comment:** It was suggested that the recycling goal should be set higher than the 50% goal that has been achieved in the past.

**Response:** *The City has a recycling goal of 50% established in 2008 by Executive Order 15-08. Chapter 3 of the Plan uses the 50% goal in the municipal waste generation forecast to ensure disposal capacity needs are not underestimated. However, as noted throughout the Plan, the City will continue to build on past achievements in an ongoing effort to meet and exceed the 50% goal. The City is considering the potential future establishment of a zero waste strategy.*

**Comment:** It was suggested that the Plan include a zero waste goal for a future year.

**Response:** *As noted in the Plan, the City is considering the potential future establishment of a zero waste strategy. In late 2016, the City released its updated sustainability plan (Greenworks) and Mayor Kenney formed a Zero Waste and Litter Cabinet. This Cabinet is tasked with identifying ways to reduce waste and litter, through a comprehensive, interdepartmental approach. The Plan has been updated to reflect these recent City initiatives.*

**Comment:** It was suggested that the City should expand the BigBelly program, targeting corridors of commerce including areas where commerce is being encouraged.

**Response:** *The City has demonstrated a strong commitment to the BigBelly program. From 2009 through 2013, the City installed BigBelly units over a phased implementation period, and subsequently installed additional units through commercial partnerships with neighborhood associations and community groups. Chapter 5.2.3 of the Plan has been updated to reflect the City's commitment to maintaining and potentially expanding existing programs that facilitate and support recycling, such as the BigBelly program, based on ongoing consideration of effectiveness and economic viability.*

**Comment:** The use of InSinkErators should be encouraged in existing construction, with incentives offered by the City for installation.

**Response:** *Chapter 5.8 of the Plan identifies policy considerations that will be addressed during Plan implementation. As noted, such discussions may include programmatic, policy and legislative actions. Further consideration of InSinkErators with incentives offered by the City for use in existing construction is consistent with identified strategies during Plan implementation, including but not necessarily limited to zero waste strategies.*

**Comment:** The Plan addresses consideration of larger, rolling bins for recycling. This should be pursued, perhaps allowing residents to select the use of the larger rolling bin if it meets their needs.

**Response:** *As described in Chapter 5.7.3, the City provides 22 gallon bins for recycling collection and allows residents to use any household container up to 32 gallons with "RECYCLING" written on it. As part of Plan implementation the City may consider providing larger roll-out recycling bins in neighborhoods where feasible and cost effective. No changes to the Plan are needed to address this comment.*

**Comment:** There needs to be an efficient, quick response number for citizens to call in waste problems, other than 311.

**Response:** *Philly311 is a City-wide service that provides direct access to City government information, services, and real-time service updates, and is the established approach within the City including for sanitation issues. Citizens can call 311 or tweet @philly311. While the Plan has not been changed to include a dedicated response number, the effectiveness of 311 for trash and recycling issues will be considered during Plan implementation.*

**Comment:** While organics management strategies in the Plan focus on the largest (commercial) generators ahead of residential generators, better communication is needed with residents regarding yard waste pick-ups and dumping locations.

**Response:** *The City's goal is to properly educate and inform its citizens regarding waste and recycling services, including yard waste and leaf collection and management programs. Outreach efforts include the website, social media outlets, and various advertising portals. During Plan implementation, the effectiveness of communication efforts will be considered.*

**Comment:** The City should consider installing small-scale anaerobic digesters to serve designated areas of the City.

**Response:** *The City considered anaerobic digestion as an alternative solid waste management method. As noted in Chapter 5.6.2 of the Plan, the City may include anaerobic digestion as part of future competitive procurement for waste processing and disposal capacity. Such a procurement could include consideration of small-scale digesters serving designated areas of the City.*

**Comment:** The City should invest in top or side load trucks and increase staffing levels of collection personnel, to reduce litter issues associated with waste set-out and collection.

**Response:** *The City appreciates the suggestion for modifying collection operations to reduce litter. The Sanitation Division of the Streets Department routinely assesses the effectiveness of the collection system, considering not only evolving equipment but also the cost-effectiveness of collection practices and associated personnel requirements, and will continue to do so during Plan implementation. Collection practices are also expected to be considered by the Mayor's Zero Waste and Litter Cabinet.*

**Comment:** The recycling advertising program should target those areas with low participation, with focused programs to achieve consistent recycling participation City-wide.

**Response:** *The City agrees with this comment. Starting in 2013, the Streets Department and RecycleBank have worked to target neighborhoods with low recycling rates and have been successful with these efforts (see Chapter 4.7.10 of the Plan). Chapter 5.2.3 of the Plan has been updated to reflect the City's commitment to maintaining and potentially expanding existing programs that facilitate and support recycling, such as targeted neighborhood projects, based on ongoing consideration of effectiveness and economic viability.*

**Comment:** The recycling group should work with the commerce department to attract companies that can utilize the raw materials (recyclables) gathered and processed here in the City.

**Response:** *Chapter 5.8 of the Plan identifies policy considerations that will be addressed during Plan implementation, including but not limited to engaging with private entities that provide waste management and recycling services. Further consideration of working to attract companies that can utilize recyclable materials is consistent with identified strategies during Plan implementation.*

DRAFT

**Appendix =**

**Zero Waste and Litter Cabinet Action Plan**



**ZERO  
STARTS WITH  
ONE**

CITY OF PHILADELPHIA  
ZERO WASTE AND LITTER CABINET

ONE PERSON. ONE COMMUNITY.  
ONE BUSINESS. ONE CITY.



# Zero Waste & Litter

CABINET  
ACTION PLAN



## Letter from the Mayor

My Fellow Philadelphians:

When I took office, I pledged my commitment to make Philadelphia a more beautiful place to live, work, and visit. The plan you hold outlines specific strategies to achieve that goal by ensuring that every neighborhood has litter-free parks, streets, waterways, and public places.

Why Zero Waste? Each year Philadelphia disposes of nearly 1.5 million tons of residential and commercial waste – one ton for every resident. As a city, we spend tens of millions of dollars each year cleaning up short dumping and litter. Although we collectively recycle almost 40 percent of combined residential and commercial waste, we have much work to do to compete with the sustainable cities of the 21st century. If we are to become a greener, more beautiful city, we must dispose of less trash, recycle and reuse more, and embrace new approaches to keeping our shared spaces clean.

The Zero Waste and Litter Executive Order commits Philadelphia to the progressive sustainability goal of Zero Waste by 2035. In doing so, we join other major U.S. cities such as Los Angeles, New York City, and Atlanta, to name just a few. The Order also promotes the use of data-driven practices and rigorous research to identify the most effective ways to tackle these challenges.

But to get there, it will take teamwork. The Zero Waste and Litter Cabinet will coordinate across City departments, partner public agencies, and community and private sector stakeholders to collectively address the litter problem. I hope this report will energize concerned residents like you to join in this effort. Because Zero starts with One – you.

Sincerely,

James F. Kenney  
Mayor, City of Philadelphia

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Philadelphia disposes of nearly 1.5 million tons of residential and commercial waste each year — **one ton for every resident.**

# Executive Summary

This action plan is a result of Executive Order 13-16 signed by Mayor James F. Kenney on December 20, 2016. Executive Order 13-16 created the Zero Waste and Litter Cabinet to move the city of Philadelphia toward a Zero Waste and litter-free future. Waste and litter negatively impact the beauty and cleanliness of Philadelphia's rights-of-way, waterways, and other public and private spaces, and landfilling waste creates emissions that contribute to climate change. Reaching the Zero Waste goals set in this plan will move Philadelphia toward achieving the Greenworks vision of becoming a sustainable city for all. City government and taxpayers spend tens of millions of dollars cleaning up and disposing of waste and litter every year. This is a cost that could be significantly reduced by enacting the right strategies to reduce the volume of materials in the city's waste stream.

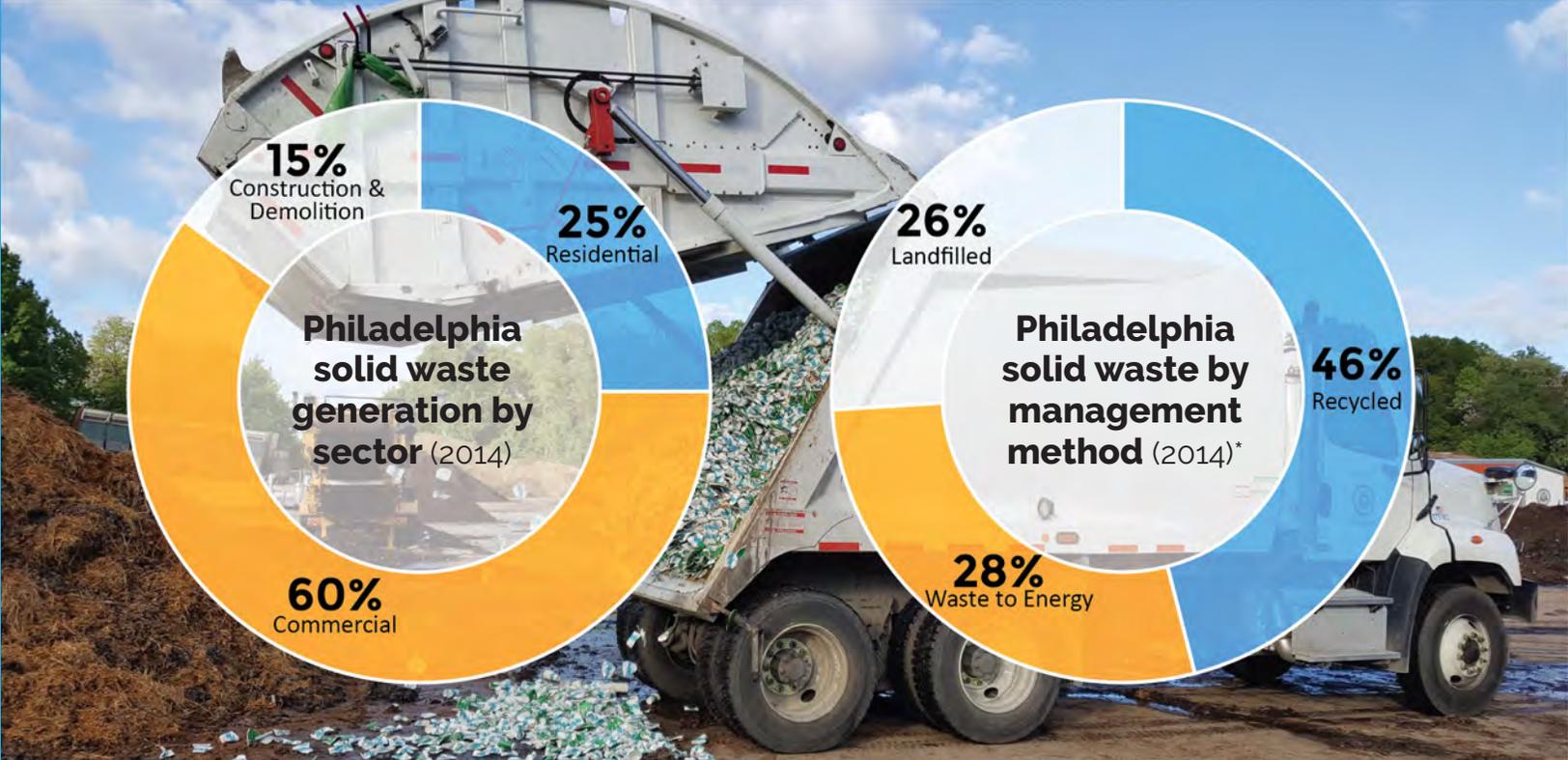
Zero Waste is one policy objective that cities of the 21st century are adopting not only to manage existing waste and litter, but also to prevent the creation of waste and litter. Zero Waste goals have been enacted by major U.S. cities such as New York, Los Angeles, and Atlanta, as well as dozens of municipalities and counties across the country. Philadelphia is proud to join these cities in striving toward the complete phase out of landfills while creating a collective voice to guide markets and industries to change their practices and embrace more progressive waste generation policies.

To accomplish the goals of reducing waste and litter in Philadelphia, the Zero Waste and Litter Cabinet was created as an interdepartmental effort to combat litter, enhance the cleanliness of streets and public spaces, and increase our waste diversion rate toward a long-term goal of Zero Waste entering landfills or conventional incinerators. The Cabinet is chaired by the Managing Director's Office, and its membership includes major City departments and agencies, City Council, and public and private sector stakeholders, all of whom will engage in advancing legislation, policy, and coordinated initiatives to achieve a city that wastes less and is litter-free. This work is developed through Cabinet subcommittees that work on five target areas to execute the implementation of the Cabinet's identified actions:

- Zero Waste
- Litter Enforcement and Cleaner Public Spaces
- Data
- Behavioral Science
- Communications and Engagement

The following action plan is organized around these five subject areas and includes the recommendations, policy objectives, and coordinated initiatives that the Cabinet has identified as the key components to achieving a Zero Waste and litter-free city. While a number of the items in this action plan are informed by new methods to manage waste and litter, other items are currently in existence in some form as programs or policy and require scaling up.

The successful implementation of these recommendations requires coordination, collaboration, and creativity among municipal departments and agencies. But it will also take commitment and civic engagement from our residents and business community. In this plan, you will read about how a business or community group can become a Zero Waste Partner and how residents can use the CleanPHL website to understand the litter conditions in their neighborhoods and access the resources needed to not just clean up litter, but also to prevent litter in the first place. Zero starts with one person, one community, and one city coming together for a Zero Waste and litter-free future. We thank you for joining this mission.



# Zero Waste

In a world of growing demand on limited resources, the sustainable management of those resources has become increasingly important. In order to encourage more sustainable practices, many leading cities across the United States have set goals to significantly reduce the amount of waste they generate and dispose of. When considering the life cycles of the materials that make up the products commonly used in daily life, much of what is typically thrown away as trash can be recovered and put to better use through activities like reuse, donation, recycling, and composting. From 1960 to 2014, the amount of municipal solid waste generated in the United States nearly tripled. Of the 258 million tons of municipal solid waste produced in the U.S. in 2014, 89 million tons were recycled or composted, 136 million tons were landfilled, and 33 million tons were combusted with energy recovery.<sup>1</sup>

Each year in Philadelphia, residents and businesses dispose of nearly 1.5 million tons of waste — one ton for every resident. Although nearly 40 percent of the city’s combined residential and commercial waste is recycled, Philadelphia still has much more work to do in order to compete among the sustainable cities of the 21st century.<sup>2</sup>

In the last two decades, Philadelphia has increased its waste diversion rate — the amount of waste being diverted away from landfills and conventional incineration — through city-wide single stream recycling and other waste reduction efforts. However, considerable opportunities exist for the city to further reduce its waste. Philadelphia’s 2014 commercial recycling rate was 45.4 percent, and its residential recycling rate was 20.3 percent, leaving significant room for improvement.<sup>3</sup> It is estimated that more than 400,000 tons of organic waste like food scraps and yard waste are thrown away as trash in Philadelphia annually.<sup>4</sup> Increasing recycling rates and diverting more recoverable materials, such as organic waste, away from landfills would allow Philadelphia to make significant advancements toward achieving its Zero Waste goal.

Reaching Philadelphia’s goal of Zero Waste by 2035 will require a major shift in the way people think about and manage their waste. In order to make this shift, Philadelphians will need new strategies and tools for thinking about and managing the materials they generate in order to reduce the volume of material entering the waste stream.

<sup>1</sup> Environmental Protection Agency. “Advancing Sustainable Materials Management: 2014 Fact Sheet.” November 2016. [https://www.epa.gov/sites/production/files/2016-11/documents/2014\\_smmfactsheet\\_508.pdf](https://www.epa.gov/sites/production/files/2016-11/documents/2014_smmfactsheet_508.pdf).

<sup>2</sup> Philadelphia Streets Department. “2016-2025 Municipal Waste Management Plan Draft” August 2016. [http://www.philadelphiastreet.com/images/uploads/documents/8-09-16\\_Draft\\_Philadelphia\\_Municipal\\_Waste\\_Management\\_Plan\\_2016-2025.pdf](http://www.philadelphiastreet.com/images/uploads/documents/8-09-16_Draft_Philadelphia_Municipal_Waste_Management_Plan_2016-2025.pdf).

<sup>3</sup> Ibid.

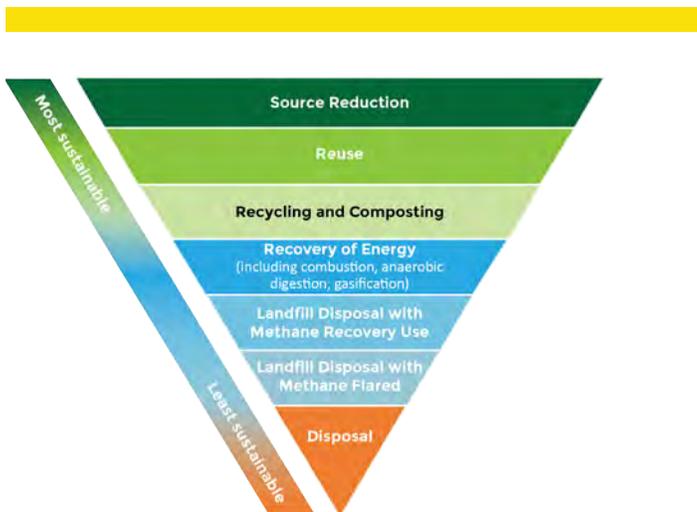
<sup>4</sup> Ibid

\* Includes construction and demolition debris.

The Zero Waste and Litter Cabinet members play an instrumental role in making the necessary policy and operational changes needed to achieve a Zero Waste future. The Cabinet’s Waste Reduction and Diversion Subcommittee works with City departments and the commercial and residential communities of Philadelphia to come to a better understanding of the city’s overall waste diversion rate and to develop strategies for further reducing the waste stream. This subcommittee helps to support the current waste reduction efforts underway by City departments and community stakeholders and aids in the creation of new strategies and the coordination of these efforts across stakeholder groups.

In addition, the Cabinet also works closely with the Solid Waste and Recycling Advisory Committee (SWRAC). This committee is convened by the Streets Department pursuant to Act 101 to assist in crafting the Municipal Solid Waste Management Plan, which all municipalities in Pennsylvania are required to develop every ten years. SWRAC contains many industry and municipal experts who began the process of Zero Waste planning as part of the 2016 Municipal Solid Waste Management Plan. In an inspiring example of collaboration and coordination, SWRAC worked with the Cabinet to develop the following Zero Waste strategy.

## Waste Management Hierarchy



Philadelphia’s Zero Waste strategy is guided by the EPA’s waste management hierarchy, prioritizing waste reduction, reuse, recycling, and composting.

## Philadelphia's Zero Waste Policy Objective and Principles

The “Zero Waste” approach refers to the management of products and goods as they are generated to minimize the amount of waste that requires disposal by focusing on sustainable production and packaging, maximizing the recyclability and recovery of products and goods generated, and minimizing waste by consumers. This approach is based on industry and government best practices and is guided by the U.S. Environmental Protection Agency (EPA)’s waste management hierarchy.

Unlike many newer American cities, Philadelphia has aging infrastructure, dense urban housing, congested transportation networks, and a high poverty rate. Given these conditions, Philadelphia needs an action plan to define and plan for Zero Waste in a way that is specifically tailored to the city’s unique challenges.

Philadelphia’s long-term “Zero Waste” objective is to fully eliminate the use of landfills and conventional incinerators by 2035. To do this, Philadelphia will reduce waste generation and increase waste diversion by 90 percent by 2035 (based on 2015 waste totals), with the remaining 10 percent utilized as waste to energy.

**Philadelphia will achieve this goal by implementing the following Zero Waste principles:**

- Advocating for the design and management of products and processes that systematically eliminate the volume and toxicity of waste materials, while recovering these resources without disposing of them through incineration or burial.
- Not sending materials of economic or environmental value, whether for reuse, resale, or recycling, to landfills. Any materials that cannot be recovered or recycled should be utilized as waste to energy. However, the City will strive to make sure that waste to energy materials will represent only 10% of the total city waste stream by 2035.
- Developing a systematic approach to evaluating and managing the flow of resources and waste created by different communities, sectors, and institutions.

- Promoting low-impact or reduced consumption lifestyles.
- Fostering and supporting reuse of discarded materials to stimulate local economic and workforce development.
- Improving access to recycling by increasing opportunities for all Philadelphians to recycle. Evaluate the feasibility of adding materials to expand the City of Philadelphia Recycling Program, including organic material recycling.

## The Strategy: How Will We Get There?

To reduce waste and make progress toward Philadelphia’s goal of reaching Zero Waste by 2035, the Cabinet has developed a four-part strategy focused on:

### 1. Waste Reduction and Diversion in Buildings

Encouraging increased recycling and other waste diversion activities in municipal and commercial buildings through the development of the Building Waste Audit Program

### 2. Waste Reduction and Diversion at Events

Increasing waste diversion from events through the development of the Zero Waste Events Program to utilize Philadelphia’s robust public events calendar and growing tourism industry to promote our city’s commitment to sustainability

### 3. Engaging the Public in Waste Reduction and Diversion

Encouraging Philadelphia residents, community groups, non-profit organizations, municipal government, businesses, and institutions to reduce waste, increase recycling and composting, and adopt waste diversion practices — and recognizing these efforts — through the Zero Waste Partnerships Program

### 4. Zero Waste Pathways

Over the next decade, Philadelphia will be exploring city-wide organic material collection as well as increased access to non-single stream recycling for residents and commercial entities. The Streets Department is currently conducting an “Organics Feasibility Study” to study the investment and systems needed for city-wide organics collection. We plan to utilize our new waste diversion tracking system to identify where there are gaps in what residents and businesses can currently recycle, using that data to help spur investment in areas where recycling diversion systems are needed to fill those gaps.

## Building Waste Audit Program

As Philadelphia advances toward a Zero Waste future, the City must ensure that municipal and commercial buildings first satisfy existing regulations pertaining to recycling and waste management. Executive Order 5-96, which established a recycling policy for municipal buildings and employees, requires all municipal buildings to offer recycling to employees and constituents. However, many municipal buildings are not in full compliance with the executive order.

Additional compliance efforts must also be targeted to the commercial sector. According to the Streets Department’s Office of Recycling, only 22 percent of commercial buildings have completed a Commercial Recycling Plan, which is required under Act 101 and Philadelphia Code Sections 10-717 and 10-724.

The Building Waste Audit Program will serve as a guide for municipal and commercial buildings to better understand their waste generation and their mandated and voluntary methods for waste diversion. A reporting process has been developed and will involve submission of a digital form identifying each facility’s generated waste materials and collection service providers, as well as options for monthly reporting to track progress toward Zero Waste. All of the information collected will be stored in a City database. Please see Appendix A to view this reporting form. The City must lead by example, and therefore building waste audits will begin with municipal buildings based off of existing policy established through Executive Order 5-96. Once this program has been developed and implemented in municipal buildings, the current Commercial Recycling Plan will be adapted to reflect the information collected through the Building Waste Audit Program.

**Philadelphia’s long-term “Zero Waste” objective is to fully eliminate the use of landfills and conventional incinerators by 2035. To do this, Philadelphia will reduce waste generation and increase waste diversion by 90 percent by 2035 (based on 2015 waste totals), with the remaining 10 percent utilized as waste to energy.**

**The Building Waste Audit Program will provide tools and resources while executing a five-step process:**

**1. Ensure that all municipal buildings have a recycling plan and use it to report recycling activity**

A Building Waste Audit Guide is in development to help building managers better understand recycling requirements, opportunities for waste diversion, and the waste audit process. This guide will list disposal options for materials that are mandated to be recycled or specially disposed of by municipal/state law, including:

- Solid Waste
- Single Stream Recycling
- Electronic Waste
- Construction and Demolition Debris
- Universal Waste
- Waste Cooking Oil and Used Motor Oil
- Medical Waste
- Hazardous Waste

**2. Enhance compliance by identifying and training Recycling Ambassadors**

The Recycling Ambassador Program was established through Executive Order 5-96. One or more staff members in each municipal building was identified and recruited to act as a Recycling Ambassador to educate fellow building staff members on proper recycling and to ensure compliance with the Executive Order 5-96 requirement that all municipal buildings must provide recycling for staff and constituents. The Cabinet will re-launch a Recycling Ambassador recruitment effort and train each Ambassador on the following:

- How to use the Building Waste Audit Guide to analyze what materials are being generated and identify methods for diversion
- How to use the digital form to report recycling activities
- How to publicly post the recycling activities form in the building
- Resources available/needed for bringing each building into compliance
- The Streets and Walkway Enforcement and Education Program (SWEEP) inspection system “Report Card Rating”

**3. Increase diversion to achieve Zero Waste**

The Building Waste Audit Guide will include guidelines on how to reduce and divert other materials in addition to those mandated by municipal/state law to be recycled or specially disposed of, such as:

- Organic Waste
- Plastic Bags
- Polystyrene
- Wood
- Metal
- Clothing
- Edible or Unopened Packaged Food

The Building Waste Audit digital reporting form will include an optional Zero Waste Reporting section for facility managers who elect to learn more about opportunities for waste diversion and report on diversion practices at their facilities. Building managers will have the option to report digitally on their waste generation and diversion practices on a monthly basis to become and maintain status as Zero Waste Partners.

**4. Create Zero Waste Partners**

Should a municipal building manager implement Zero Waste practices in the building’s waste management operations, as documented through the online reporting system and database, the City will recognize the building as a Zero Waste Partner. Please see the Zero Waste Partnerships Program section of this plan for more information.

**5. Expand audit program to all commercial buildings**

The City will develop, launch, and collect data on the municipal program during Fiscal Year 2018, adapt the current Commercial Recycling Plan to reflect the information collected through the Municipal Building Waste Audit Program, and plan to launch a new Commercial Building Waste Audit Program in Fiscal Year 2019.





## The Waste Watchers Program provides a three-bin system that separates landfill waste, recycling, and compost.

Event organizers will have the option to submit a digital form to report on their event's waste management practices and waste diversion rate and learn about further opportunities for waste diversion. Please see Appendix B to view this form. Should an event organizer implement Zero Waste practices in the event's waste management operations, as documented through the online reporting system and database, the City will recognize the event as a Zero Waste Partner. Please see the Zero Waste Partnerships Program section of this plan for more information.





Using the Keep Pennsylvania Beautiful metric that estimates the total municipal costs for cleaning illegal dumping at **\$619 per ton, illegal dumping equates to \$8,124,375 in costs to city taxpayers annually.**<sup>7</sup>

## LITTER ENFORCEMENT & Cleaner Public Spaces

Although progressing toward a Zero Waste goal by 2035 is a compelling and exciting opportunity to enhance Philadelphia's environmental sustainability, the Cabinet also recognizes the significant shorter-term, more immediate challenges posed by the waste that presently exists. Like many large, dense cities, Philadelphia has struggled to fight litter and illegal dumping for generations. Zero Waste cannot be achieved when neighborhood streets are littered with trash and materials that could be recycled. The term "Filthadelphia" was used to describe the streets of the city as far back as 1919.<sup>6</sup> Now, nearly a century later, Philadelphians continue to spend enormous amounts of time, money, and energy to combat the persistent challenges of litter and illegal dumping:

- According to Fiscal Year 2016 statistics, the City's Community Life Improvement Program (CLIP) removed 1,600 tons of debris from 128 heavily dumped lots, and the Streets Department removed 11,525 tons of material from 921 lots.
- Using the Keep Pennsylvania Beautiful metric that estimates the total municipal costs for cleaning illegal dumping at \$619 per ton, illegal dumping equates to \$8,124,375 in costs to city taxpayers annually.<sup>7</sup>

- This financial cost is in addition to the tens of thousands of staff hours spent by employees of the Streets Department, Philadelphia Parks and Recreation, CLIP and a number of other agencies cleaning up litter and illegally dumped household trash — time that could otherwise have been spent delivering core services to the public.

In addition to these powerful statistics, pictures taken throughout the city clearly illustrate the severity of this problem in Philadelphia's neighborhoods. The city simply cannot provide a strong quality of life in all neighborhoods if such dumping continues.

The Litter Enforcement and Cleaner Public Spaces Subcommittee reviews the current enforcement, fines, and penalties for littering and short dumping in Philadelphia. The subcommittee aims to better understand what enforcement strategies most effectively combat litter and how to best coordinate enforcement efforts. This subcommittee also uses data collected from the Data Subcommittee to determine the most effective strategies for waste management and collection in Philadelphia's public realm.

12 <sup>6</sup>Dent, Mark. "No litter in Philly: Inside the plan for zero waste by 2035." Billy Penn. April 05, 2017. Accessed June 16, 2017. <https://billypenn.com/2017/04/05/no-litter-in-philly-inside-the-plan-for-zero-waste-by-2035/>.

<sup>7</sup>MSW Consultants. Statewide Illegal Dumping Cost Research. Report. Keep Pennsylvania Beautiful . August 2014. [http://www.keeppabeautiful.org/wp-content/uploads/2016/09/KPB-Statewide-Illegal-Dumping-Cost-Research\\_Final\\_8-20-2014.pdf](http://www.keeppabeautiful.org/wp-content/uploads/2016/09/KPB-Statewide-Illegal-Dumping-Cost-Research_Final_8-20-2014.pdf).



The Litter Enforcement and Cleaner Public Spaces Subcommittee's vision is to employ a combination of punitive and proactive approaches to create lasting behavior change among residents, businesses, and visitors. The subcommittee used the following "Five Steps to Behavior Change," as developed by Keep America Beautiful, to develop its final recommendations and plan.<sup>8</sup>

**1. Get the facts**

- What data is needed to show what needs to change?

**2. Prioritize behavior**

- Target the who, what, where, why, and how to make a solid, yet flexible and responsive (but not reactive) plan.

**3. Develop and implement an action plan**

- Consider actions, audience, and execution.

**4. Evaluate impacts**

- Consider environmental, economic, and social impacts.
- What is most successful? What can be improved? What needs to go?

**5. Provide feedback**

- Use these five steps to utilize the action plan internally within City government operations, and include public stakeholders in implementing these plans within communities.

Working within that framework, the subcommittee conducted hours of review through meetings and one-on-one interviews with City departments and agency leadership to evaluate every existing regulation, policy, and ordinance relating to litter and cleaner public spaces in Philadelphia. Each of these regulations,

policies, and ordinances was evaluated through the following three principles for determining effectiveness:

• **Can we do it?**

- What are the legal needs and barriers to do this?
- What are the operational needs and barriers to do this?
- What are the public needs and barriers to do this?
- What are the funding, resources, and staff needs to do this?

• **Will it work?**

- Will it yield anticipated results with public behavior change through public outreach?
- Will operations and field staff buy in to ensure full enforcement?
- Will we have concrete data to show effectiveness?

• **Is it worth it?**

- Will the funding, resource, and staffing investment be worth it?
- Will it affect the larger picture?

The following 31 recommendations for enhanced regulations, policies, and ordinances were all considered according to these three criteria and were determined through Cabinet consensus to be the most effective steps to move Philadelphia forward to becoming a litter-free, world-class city. These recommendations are divided into two categories — litter enforcement and cleaner public spaces — and separated into short-term and long-term goals. Please consult Appendix C of this action plan for a full evaluation of these recommendations.

<sup>8</sup>Youth Guide to Service and Project-Based Learning. Report. Keep America Beautiful. Summer 2015. [https://www.kab.org/sites/default/files/News%26Info\\_Publications\\_YouthGuidetoServiceandProject-BasedLearning.pdf](https://www.kab.org/sites/default/files/News%26Info_Publications_YouthGuidetoServiceandProject-BasedLearning.pdf)

# Litter Enforcement

## Short-term Priorities

1. Improve tire regulation and enforcement
2. Include construction and demolition waste plans on all Licenses and Inspections (L&I) construction, demolition, and alterations permits
3. Coordinate and improve short dumping surveillance
4. Increase short dumping fines
5. Impose mandatory community service hours for short dumping diversion programs
6. Impose seizure of vehicles involved in short dumping crimes
7. Increase and streamline illegal dumping cases in court system
8. Coordinate education and enforcement of the requirements of the waste bin law for all commercial establishments selling prepared or prepackaged food
9. Increase zoning code enforcement of interior trash storage for new construction or variances
10. Identify and enforce dumpster-free streets
11. Increase enforcement and education on improper waste set outs
12. Increase enforcement of \$300 moving violation for throwing trash out of a window
13. Mandate that all circulars are designed as door hangers
14. Revise Section 9-604 (5)(6)(7)(8) of the Philadelphia Code regarding hauler reporting

## Long-term Priorities

1. Create a formalized environmental crimes unit within Philadelphia Police Department Neighborhood Services Unit
2. Develop monthly Code Violation Notice (CVN) reports for issuing departments
3. Ban plastic bags
4. Coordinate commercial waste pickups with commercial waste haulers
5. Create a 311 "Street Trash" ticket
6. Improve coordination with Scrap Yard Task Force
7. Include an abatement fine when CLIP abates vacant lots

# Cleaner Public Spaces

## Short-term Priorities

1. Increase enforcement and education of mattress disposal regulations
2. Determine the most strategic placement of public waste receptacles and map their locations
3. Study increased access to lidded residential recycling bins
4. Increase outdoor recycling at parks and recreation sites
5. Increase removal of illegal clothing donation bins
6. Expand access to sanitation convenience centers
7. Construct trash corrals for recreation centers
8. Increase proactive solutions for illegal sign abatement

## Long-term Priorities

1. Consider restoration of street sweeping
2. Increase support of temporary and long-term community solutions to activate and secure vacant lots



# Data

## 2007 City of Philadelphia Litter Index Scoring Metrics

Rating 1-4	Description
1.0-1.5: No litter. A slightly littered area that has less than 5 pieces on the entire block.	Neighborhood streets are completely free of litter.
1.5-2.0: Littered. Between 5 and 9 pieces of litter on a block or a designated area.	Neighborhood streets have scattered areas of loose litter along curbsides and streets, gutters and fence lines.
2.1-3.0: Excessively Littered. Between 20 and 29 pieces of litter on a block or designated area.	Streets and sidewalks consistently littered throughout the area. Heavy concentrations of litter along vacant lots, fence lines, abandoned houses and along major thoroughfares.
3.1-4.0: Extremely Littered. More than 30 pieces of litter and other trash related issues on a block or a designated area.	Illegal Dumping, streets and sidewalks consistently littered through out the area.

Using these scoring metrics, the Streets Department utilized field sanitation staff to take paper surveys of conditions solely on City-owned rights-of-way based on randomized routes organized by police districts. The resulting information led to the development of the 2009 data map for the city featured on the following page.

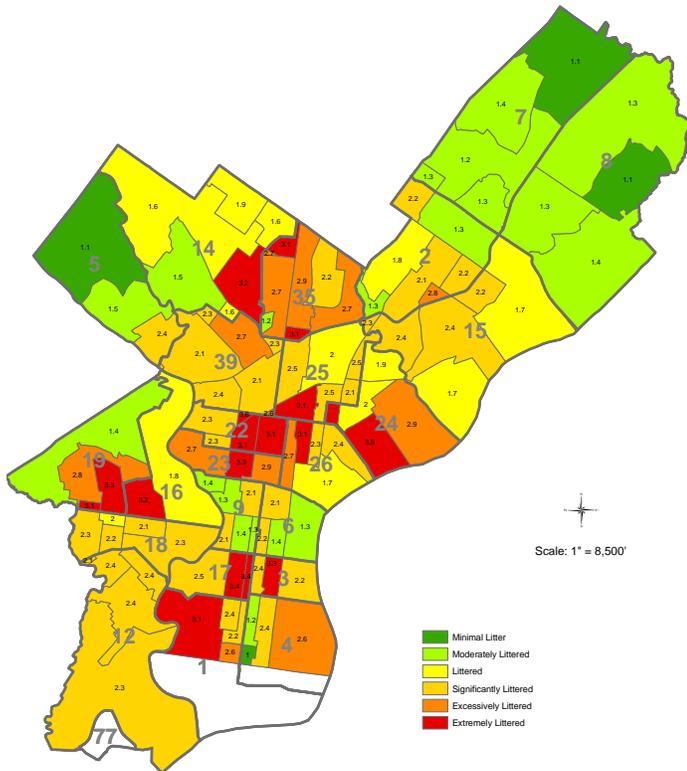
In order to achieve the objectives set forth in the Zero Waste and Litter Enforcement and Cleaner Public Spaces sections of this action plan, Philadelphia must use data to guide its policy and investment decisions and measure their effectiveness.

The Data Subcommittee uses collaborative and innovative data management processes and tools to collect and analyze existing waste data from each department represented in the Cabinet. While this subcommittee will be working on the cumulative data needs of the Cabinet, it is currently working on two very important data initiatives — city-wide litter indexing and city-wide waste diversion calculation and tracking.

### City-Wide Litter Indexing

The first city-wide litter indexing was conducted by the Streets Department in 2007 under the leadership of then Deputy Commissioner Carlton Williams. This index was based on metrics derived from the Keep America Beautiful Community Appearance Index.

## City of Philadelphia Litter Index July 2009



While this was an extremely successful and worthwhile program, staffing and technological limitations made it difficult for the Streets Department to conduct a broader index and compile a larger data set. With the support of the Cabinet and the Data Subcommittee, the City of Philadelphia Litter Index has been redeveloped into a map-based survey of the litter conditions of the city’s streets, parks and recreation sites, public school sites, green stormwater infrastructure, riverways, vacant lots, transit stations, and other publicly-owned rights-of-way. The litter indexing is conducted by staff in the departments responsible for the aforementioned City assets and property — the Streets Department, CLIP, the Department of Parks and Recreation, the School District of Philadelphia, Philadelphia Water Department, and the Southeastern Pennsylvania Transportation Authority (SEPTA). The index is digitized using cloud-based tablet surveys developed by the Office of Innovation and Technology (OIT) using map-based GIS locations to ensure accuracy. The departmental data is managed by department IT and data analytics staff, and the overall data is aggregated by OIT.

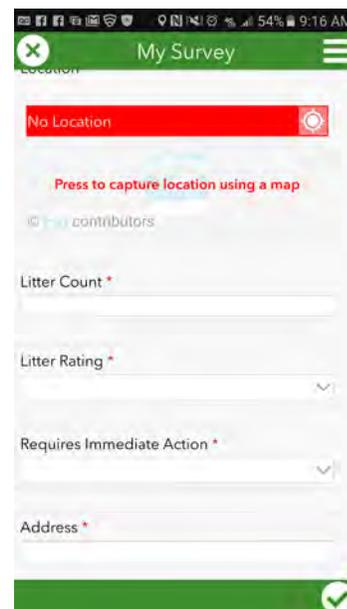
Along with counting each piece of litter on a City asset or property, the surveyors also provide a litter rating on a scale of one to four based on Keep America Beautiful metrics. The rating system is as follows:

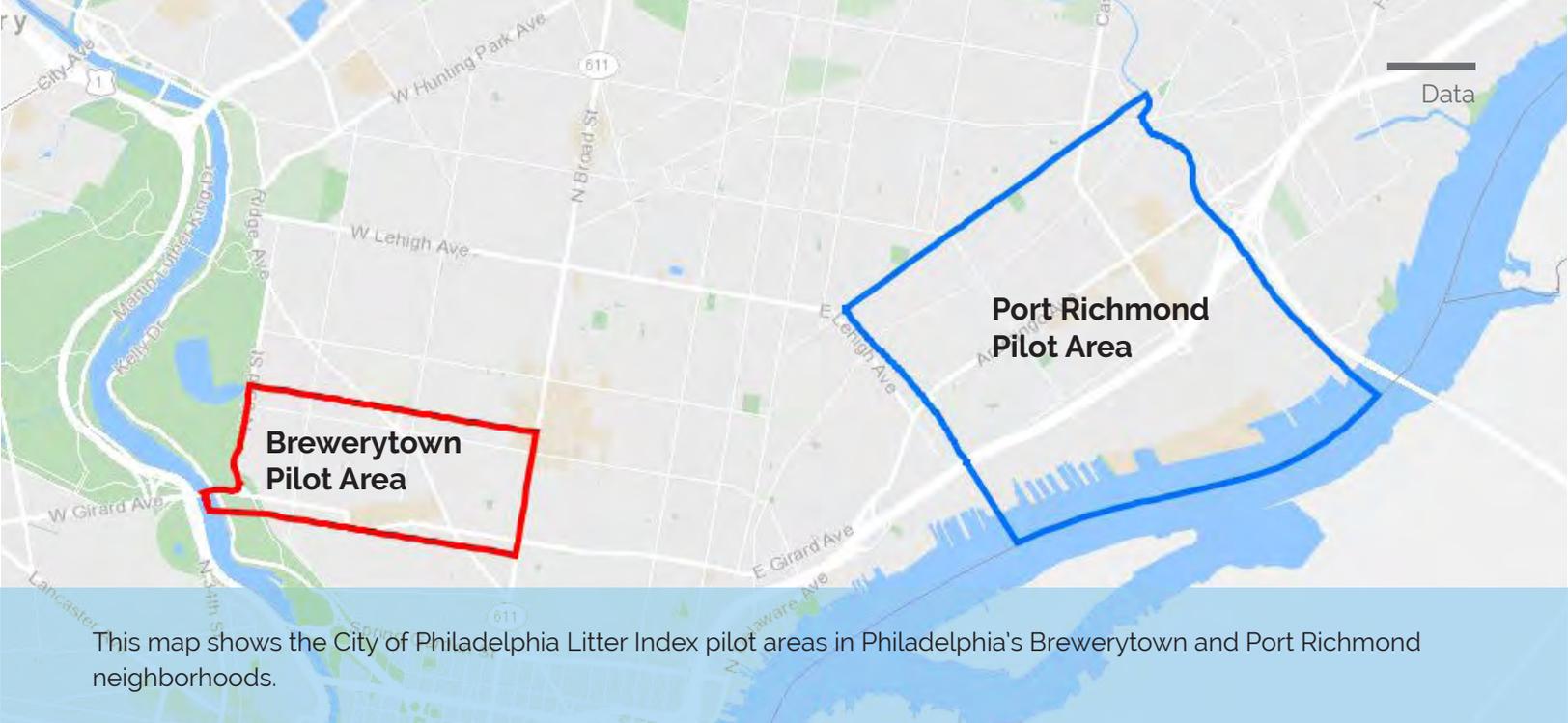
- 1: Little to no litter
- 2: Litter in the amount that can be collected by a single person
- 3: Litter in the amount that would require collection by a team of people
- 4: Litter in the amount that would require collection by a large team of people and/or heavy machinery

The survey also includes a “Requires Immediate Attention” button that automatically sends a service request to 311 with all pertinent information. This button is used for ratings of 4 and/or heavy illegal dumps that are either in the right-of-way or are causing unsafe conditions.

The revamped City of Philadelphia Litter Index was piloted in Philadelphia’s Brewerytown and Port Richmond neighborhoods in spring 2017. The Brewerytown pilot area’s borders stretched from Broad Street to 33rd Street and Montgomery Avenue to Poplar Street. The Port Richmond pilot area’s borders stretched from Somerset Avenue to Castor Avenue and Kensington Avenue to the Delaware River.

## Litter Index Survey





This map shows the City of Philadelphia Litter Index pilot areas in Philadelphia's Brewerytown and Port Richmond neighborhoods.

The pilot litter indexing was conducted by five of the participating departments during two trial phases of March 1, 2017 to April 15, 2017 and May 15, 2017 to June 15, 2017. SEPTA conducted its pilot independently from June 15, 2017 to July 15, 2017. During this time, the Data Subcommittee compiled feedback from field staff, department data analysis staff, and IT staff to refine the survey and process for collecting information. All of this information has led to a final version that will be expanded city-wide by all six participating departments on the assets they are responsible for monitoring. Going forward, the City of Philadelphia Litter Index survey will take place twice per year.

### How Litter Index Data Will Be Used

The Data Subcommittee intends to use the City of Philadelphia Litter Index data to create more coordinated responses to litter conditions among the departments participating in the litter indexing. The data will be used to:

- Analyze areas where a majority of assets were scored “4,” and create coordinated responses with appropriate departments and agencies
- Analyze areas where a score spiked due to one asset with a “4” rating, and create coordinated responses with appropriate departments and agencies
- Compare areas with ratings of “3” and “4” in regards to 311 calls, L&I violations, and other datasets to analyze the need for increasing City service outreach, increased enforcement, and increased education

The results of the City of Philadelphia Litter Index datasets from the six participating departments will be aggregated into smaller segments of city blocks to inform residents through a searchable database of the litter conditions in their neighborhoods and surrounding areas. This data will be made available through the Clean PHL website. More information on this website can be found in the Communications and Engagement section of this plan.

### Calculating Philadelphia's City-wide Waste Diversion Rate and Tracking Progress

In order to identify actions that Philadelphia can take to reduce waste and improve the city-wide waste diversion rate, the city's current baseline waste diversion rate must first be established. Providing an accurate measurement of Philadelphia's city-wide waste diversion rate will require the City to capture information about its waste stream that has not been included in previous estimates. To do this, a new system has been developed to systematically track Philadelphia's waste stream in its entirety.

The City's inventory of the local waste management system is being updated to include new materials and processes for which there are currently no reporting mechanisms in place. Information about the weight of materials handled by recycling facilities and service providers in Philadelphia is currently reported to the Streets Department, as required by Act 101. Data about reuse, composting, and other methods of diversion obtained through the new system will be combined with Act 101 reporting data on the recycling industry to form a more complete picture of Philadelphia's waste stream for the first time.

# Materials Included in City-wide Waste Diversion Rate Calculation

## ORGANICS



Yard & leaf waste  
Renderings  
Pre-consumer food waste  
Post-consumer food waste  
Pre-consumer recovered food  
Post-consumer recovered food

## METALS



Aluminum cans	Mixed metals
Steel cans	Motor vehicles, engines & more
Ferrous metals	White goods
Non-ferrous metals	

## GLASS



Clear  
Colored  
Mixed  
Window glass

## PAPER/CARDBOARD



Office paper (all high grades)  
Newsprint  
Magazines/catalogs  
Mixed or other paper grades  
Composite paper & plastic

## PLASTICS



PET	PP
HDPE	PS
PVC	Mixed or other
LDPE	Plastic film

## OTHER MATERIALS



Single stream recycling	Housewares
Commingled recycling	Furniture
Polystyrene	Mattresses
Tires	Paint
Printer cartridges	Other source-separated streams

## HOUSEHOLD HAZARDOUS WASTE



Antifreeze	Fluorescent lamps
Batteries (lead-acid)	Motor oil
Batteries (Ni-Cad/NiMH)	Oil filters
Batteries (lithium)	Oil paints
Batteries (other)	Other household hazardous waste

## NON-DIVERTED SOLID WASTE



City-collected municipal solid waste	Universal waste
Privately-collected municipal solid waste	Pharmaceutical waste
	Biomedical waste

## WOOD WASTE



Pre-consumer wood waste  
Post-consumer wood waste

## TEXTILES



Textiles (clothing)  
Textiles (other textiles)

## ELECTRONICS & APPLIANCES



Covered devices  
Non-covered devices

## CONSTRUCTION & DEMOLITION DEBRIS



Non-hazardous C&D waste  
Hazardous C&D waste  
Carpet  
Asphalt

To determine Philadelphia's city-wide waste diversion rate, the following formula will be used:

$$\text{Waste Diversion Rate (WDR)} = \frac{\text{Tons Diverted}}{\text{Tons Generated}} \times 100$$

**Tons Diverted** = Tons Donated + Tons Repaired/Resold + Tons Reused/Upcycled + Tons Recycled (including mail-in, drop-off, or take-back programs) + Tons Composted + Tons Fed to Animals + Tons Incinerated (for energy recovery) + Tons to Engineered Fuel Product

**Tons Generated** = Tons Landfilled + Tons Incinerated (conventional) + Tons to Professional Disposal (of regulated materials or proprietary technology) + Tons Diverted

## Processes Included in City-wide Waste Diversion Rate Calculation

### DIVERSION PROCESSES



Donate  
 Repair/Resell  
 Reuse/Upcycle  
 Recycle  
 Mail-in or drop-off only recycling program  
 (not by manufacturer)  
 Manufacturer take-back (recycling)  
 Compost  
 Animal feed  
 Incineration (energy recovery)  
 Engineered fuel product

### DISPOSAL PROCESSES



Landfill  
 Incineration (conventional)  
 Professional disposal of regulated materials  
 Manufacturer take-back (disposal)

After careful study and evaluation of Philadelphia's waste stream, lists of materials and processes to include in the city-wide waste diversion calculation were developed. These lists encompass most of the materials generated in the municipal, commercial, and industrial sectors in Philadelphia and the methods through which they are diverted or disposed.

Many of the materials and processes included here, such as organic waste collected by local compost haulers, donated materials, and some materials processed by small recycling businesses, have not been included in previous city-wide waste diversion rate estimates. The Cabinet will utilize this set of materials and processes to build a database of haulers, recycling facilities, and donation facilitators. Within this database, waste generation and diversion in Philadelphia's commercial, residential, and combined sectors will be tracked. Database participants will be contacted and asked to report on the weight of material they process annually under the new reporting system. These weights will be used to calculate the city-wide diversion rate using the waste diversion rate formula.

This new and more comprehensive measurement of Philadelphia's waste diversion rate and yearly benchmarking will allow City officials to identify gaps in capacity to divert specific materials, determine opportunities for waste diversion, and consider different options to determine the most effective strategies for diverting waste and advancing toward Philadelphia's ambitious goal of Zero Waste by 2035.

### Next Steps

In addition to the city-wide litter indexing and city-wide waste diversion calculation and tracking, the Data Subcommittee will also work to address any other data needs of the Cabinet and act as a convener to coordinate and collectively analyze all department and public data needed to abate litter and lead the city to a Zero Waste future.



# Behavioral Science

The City cannot effectively address its litter problems simply by cleaning up more trash. Instead, litter must be prevented from occurring in the first place. In order to prevent litter effectively, there is a need to understand the “who,” “what,” “how,” and “why” of litter. If one were to ask a field staff employee from the Department of Parks and Recreation or the Streets Department “how” and “why” litter happens, or “who” litters, he or she is certain to receive mixed responses. While institutional knowledge rooted in observation and experience is extremely valuable and often accurate, proven scientific methods must also be utilized in order to definitively identify and address the problem. Scientific methods ensure that observation and experience are validated with data in order to not only clean up litter, but also prevent it before it occurs. This approach is an extension of the data-driven methods the Cabinet is using to inform policy, legislation, and initiatives that will lead to a Zero Waste and litter-free city.

The Behavioral Science Subcommittee works with outside experts from Philadelphia’s local academic institutions to develop and execute studies that analyze what motivates individual actions and how well-designed environmental nudges can lead to less littered areas. The goal of this effort is to better inform public messaging and initial neighborhood strategies for litter reduction and increase awareness of waste collection systems. In partnership with GovLabPHL, an initiative hosted by the Mayor’s Office of Policy, the Cabinet worked with researchers from Temple University, Swarthmore College, and the University of Pennsylvania to conduct the following two pilot studies in the spring of 2017.

## Lidded Recycling Bin Distribution

**Objective:** One commonly cited barrier to residential recycling is the availability of recycling bins. At an information session (coordinated by the Department of Parks and Recreation, the Managing Director’s Office, and Keep Philadelphia Beautiful) at Wister Playground in November 2016, participants’ most common suggestion to increase their recycling participation was to make bins more accessible. If enhancing the accessibility of recycling bins encourages greater recycling participation, the City will incur lower costs since disposing of recyclable material is much cheaper than disposing of rubbish. Additionally, in response to reports of open-top

recycling bins contributing to litter due to items being blown along the street while awaiting pickup, the Cabinet chose to distribute lidded recycling bins and evaluate the impact of that distribution on recycling behavior and litter conditions.

**Methodology and Data Collected:** This pilot involved coordination between the Streets Department, the Commerce Department, the Department of Parks and Recreation, the Mayor’s Office of Policy, and the Managing Director’s Office. A focused recycling bin distribution was tested to assess its impact on recycling participation and littering. In April 2017, lidded residential recycling bins were distributed at local recreation centers in two neighborhoods — Port Richmond and Brewerytown. These neighborhoods were chosen because baseline litter index data was available.

Using recycling and rubbish collection route maps provided by the Streets Department, two routes were selected in each neighborhood to act as the treated routes, and surrounding routes were identified as the control routes. The treatment routes were chosen based on the number of households on the routes as well as proximity to the recreation centers where the bin distribution would occur. Historical tonnages for rubbish and recycling were collected for both the treated and control routes. Flyers were distributed to residents on the treated routes one week prior to make them aware of the bin distribution. Bins were available one Saturday afternoon and were provided to all residents that came to the pickup location, regardless of whether they were on the treatment routes. Their names, addresses, and emails were recorded, and only one bin was given per household. 840 bins were distributed in Port Richmond and 704 bins were distributed in Brewerytown for a total of 1,544 bins distributed. Canvassing efforts and bin distribution were performed by volunteers recruited through Serve Philadelphia. Residents who picked up a bin were given surveys asking them to explain why they needed a new bin and to rate their experience with having an extra bin or with having a bin with a lid. These surveys are being compiled and will factor into the final report to be prepared for the Cabinet by the university behavioral scientist partners. Surveys were also administered to the sanitation workers on the treated routes to gauge their rating of the time and labor spent picking up recycling that was now lidded as well as their observations on the recycling contamination and litter conditions on these routes.

**Time Frame:** Recycling bins were distributed in April 2017. Recycling and rubbish tonnages were measured for five weeks following the distribution to evaluate the impact of the distribution on recycling participation and were compared to historic recycling and rubbish tonnage data. Litter index measurements collected prior to the distribution (March to April 2017) and following the distribution (May to June 2017) will be compared to assess the impact of the distribution on local litter.

**Anticipated Outcomes:** The Cabinet anticipates that the findings from this pilot will inform decisions within City government regarding residential recycling initiatives. For example, the results may help assess the impact of local, targeted distribution of recycling bins on residential recycling participation. Philadelphia residents often report that recycling bins are challenging to obtain, creating a barrier to their participation in recycling programs. Local bin distributions provide one means to address this issue. However, such distribution efforts involve both the direct cost of the bins and the City resources deployed to facilitate the distribution. By evaluating the impact of this distribution on recycling participation rates, the present pilot helps calculate the financial benefit of this distribution (as disposal of recycling is less costly than rubbish disposal — and indeed can generate revenue). At a more subjective level, initial feedback from participating residents has been extremely positive, suggesting that these types of initiatives are viewed favorably by the community.

## Strategic Placement of Public Waste Receptacles

**Objective:** In 2011, New York City began experimenting with removing trash receptacles from select public transportation stations. While this effort was initially praised, as it seemed removing the receptacles counter-intuitively decreased litter at the stations, recent audits have revealed that the removal actually increased litter and track fires at the affected stations.<sup>9</sup> There has been growing interest in the city of Philadelphia and other municipalities regarding the pros and cons of introducing similar changes. Through this experiment, the Cabinet sought to assess the influence of both increasing and decreasing the number of available trash receptacles in public spaces on citizens’ waste disposal practices.

<sup>9</sup> MTA/NYC Transit - Trash Can Free Stations Pilot Program Report 2014-5-29. Report. State of New York Office of State Comptroller. September 22, 2015. <https://www.osc.state.ny.us/audits/allaudits/093015/14s29.pdf>.



**Methodology and Data Collected:** This pilot involved coordination between the Streets Department, the Commerce Department, the Department of Parks and Recreation, the Mayor’s Office of Policy, the Managing Director’s Office, and four local community development groups. Four parks and four commercial corridors located across northern Philadelphia were targeted in this pilot. From May 2017 to July 2017, waste receptacles were systematically added and removed at each location. Each of these eight locations experienced at least one increase in the number of available receptacles, at least one decrease in the number of available receptacles, and at least one period where the number of available receptacles was left unchanged (to serve as a baseline or control within each location).

Each treatment period lasted approximately two weeks. Receptacles were provided or removed by the Streets Department and the Department of Parks and Recreation. Staff from the Commerce and Parks and Recreation Departments oversaw the data collection process. During this time, data was collected at each site regarding the amount of litter and short dumping observed, the trash collected as litter, the trash collected as properly disposed rubbish from available bins, the staff hours spent cleaning litter, and the comments received from citizens regarding the changes.

**Time Frame:** Data was collected from May 2017 to July 2017.

**Anticipated Results:** The Cabinet anticipates that the findings from this pilot will inform decisions within City government regarding how best to deploy waste receptacles in public areas. The results are anticipated to help inform decisions regarding where, when, and whether to alter the number of available public waste receptacles in order to minimize littering in the city. The present pilot also includes several means to assess the value of changes in the number of waste receptacles, as the impact can be measured with respect to staff hours spent cleaning litter, littering and short dumping observed, and citizen responses to the changes. At a more subjective level, initial feedback from citizens and community development partners has been positive following increases and negative following decreases in waste receptacle availability.

The Cabinet’s goal is to utilize the information from these two pilots to scientifically inform the City’s investments and policies regarding the distribution of lidded recycling bins to residents and the most strategic placement of public waste receptacles. The Cabinet also hopes to build off the successes, processes, and lessons learned from these two pilots to continue learning about behavior as needed. In fall 2017, the Cabinet hopes to evaluate the effectiveness of litter and waste reduction messaging campaigns with the hope that the success of these evaluations, as well as continued success of the GovLabPHL program, will allow the City to better understand the effectiveness of many components of this action plan.

# ZERO STARTS WITH ONE

CITY OF PHILADELPHIA  
ZERO WASTE AND LITTER CABINET



## Communications & Engagement

In support of the Zero Waste and Litter Cabinet's goals and objectives, the Streets Department launched a new advertising campaign in spring 2017. The campaign's tagline, "Zero Starts With One," encapsulates the ethic that a Zero Waste future for Philadelphia will not happen on its own. It will take commitment and a coordinated effort from the entire city, including individuals, community organizations, businesses, institutions, and municipal government.

The Communications and Engagement Subcommittee has developed strategies to engage City departments, residents, businesses, and other stakeholders to better understand litter and waste challenges by using clear and unified language that is informed by sophisticated data, improved collaboration between City departments, and increased outreach to city residents and private sector stakeholders. This messaging includes a mix of digital media, along with the tried and true grassroots methods of community organizing, to ensure that the message crosses the digital divide and is as inclusive as possible. In order to be successful, a strong emphasis must be placed on educating individuals about Zero Waste principles and practices, as well as providing inspiration to people to help keep their city clean. The following digital and on-the-ground strategies will be employed to accomplish this ambitious goal.

### Clean PHL

A major request that the Zero Waste and Litter Cabinet received while conducting outreach to community stakeholders, partner organizations, and city residents was to have one comprehensive website that contained organizational resources, engagement opportunities, and information for addressing litter abatement. The website [CleanPHL.org](http://CleanPHL.org) was created to meet this need by aggregating multi-departmental and community partner information organized in the following three sections.

- **Engagement Opportunities**  
Residents can use this section to find volunteer or engagement opportunities they can take advantage of to help keep their communities clean.
- **Organizational Resources**  
Residents can use this section to find the educational and programmatic resources needed to organize with their fellow residents to help keep their communities clean.
- **Materials and Templates**  
Residents can use this section to find the print and web-based materials needed to help keep their communities clean.

The other main function of CleanPHL.org is to host the searchable City of Philadelphia Litter Index that the public can use to find the litter scores for their immediate areas. Residents, community leaders, and service organizations will be able to type in their address, and the site will be populated with a City of Philadelphia Litter Index score. Scores are calculated by the Office of Innovation and Technology based off an aggregate of the scores collected by the six partnering departments. The score will also be accompanied by a series of pictures taken to verify that each area was indexed. The Cabinet intends to encourage residents, community leaders, and service organizations to use the index to better understand the litter conditions of their immediate and surrounding areas to help ensure that litter is cleaned up, but also, more importantly, to preempt its accumulation.

Along with the City of Philadelphia Litter Index score, the website will also show residents a box containing information pertaining to the different City and community resources to help keep neighborhoods clean, along with other necessary information. These resources are geocoded and include but may not be limited to:

- Where is the closest sanitation convenience center?
- Does the block have a block captain?
- Does the park have a friends group?
- Is there a nearby watershed group?
- Is there a nearby registered community organization or neighborhood advisory council?
- What is the local trash and recycling collection schedule?

This section will contain yes or no answers to these questions as well as more specific information. The Cabinet's intention is for residents to be able to compare and contrast their local litter scores with the amount of resources in their neighborhoods. The goal is to help stakeholders understand that having resources such as block captains, friends groups, and other community organizations is paramount to preventing litter. Providing readily available access to this information in an accessible format will encourage more individuals to take advantage of these programs and join the fight against litter. To further streamline this process, each question will contain links to the specific resource. For example, if a resident finds that his or her block's City of Philadelphia Litter Index rating is a four, yet the area lacks a block captain, that resident can click on a link to learn more about becoming a block captain, thus joining

in Philadelphia's fight against litter. It is an overarching goal of the Zero Waste and Litter Cabinet for the City of Philadelphia Litter Index to become the tool that brings each individual neighborhood to the cleanest litter rating possible.



## Waste Watchers

While an online presence is necessary for reaching people in the digital age, there is no substitute for the tried and true techniques of grassroots community organizing. This type of organizing created the incredibly successful Philadelphia More Beautiful Committee's Block Captain Program as well as the Philadelphia Parks and Recreation Neighborhood Stewardship Network. The Cabinet is inspired by the hard work, dedication, and high functionality of these programs and desires to build off their legacies and models rather than creating new or competing programs for this action plan.

With that intention, the Communications and Engagement Subcommittee established the goal of creating a complimentary program that could act as a continuous thread to tie together all of the existing community and City stewardship programs under the focused task of litter abatement. After much discussion, the subcommittee identified the existing Waste Watchers Program to act as this thread.

The Waste Watchers Program was created in 2011 through a partnership between the Office of Sustainability and the Mayor's Office of Civic Engagement and Volunteer Service. The goal was to work with the consultants and City staff of the Philadelphia Marathon to increase recycling and introduce



composting to event participants. Through grant funding and donations, the program acquired three-bin systems to collect waste, recycling, and compost. The program then recruited volunteers to monitor the bins and educate event participants on proper disposal, and program coordinators worked with City departments including the Managing Director’s Office of Special Events and the Streets Department to operate the program.

Over six years, the Waste Watchers Program worked with other City staff to achieve Zero Waste designation (90 percent diversion of all materials) from the Philadelphia Marathon and expanded into other events such as the Broad Street Run, the Love Run, and the Philadelphia Science Festival. Along with the Cabinet’s stated goal of making Philadelphia the “Home of Zero Waste Events,” the Communications and Engagement Subcommittee also sees a great opportunity to expand the scope to the following three areas to further build capacity for grassroots organizing for Zero Waste and litter abatement.

- Community Presentations
- Zero Waste Block Cleanups
- Zero Waste Event Volunteering

To achieve these three objectives, the Communications and Engagement Subcommittee, in partnership with Recyclebank, will develop a curriculum that provides residents and

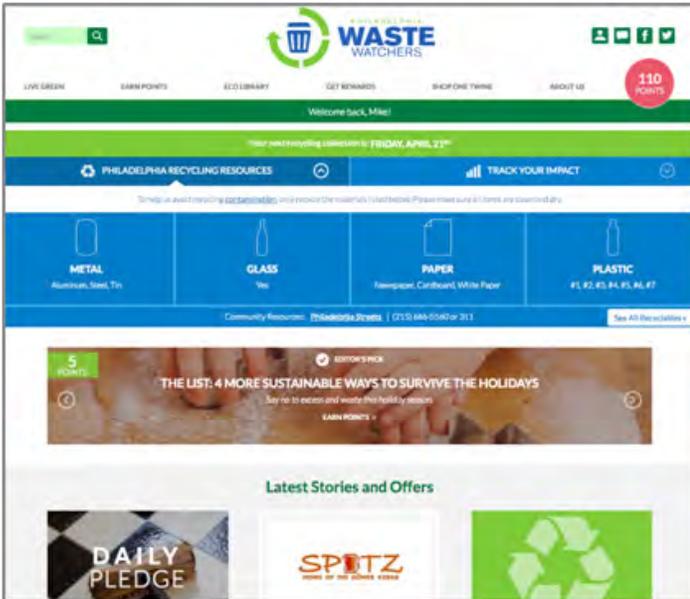
community stakeholders with resources, support, and training on promoting Zero Waste principles for cleanups, event volunteering, and community education. This curriculum will be offered in quarterly training sessions to people in existing stewardship programs such as the block captain program or City stewardship groups as well as to individuals who would like to make a difference in Zero Waste and litter abatement.

Participants in the training program become certified Waste Watchers after successfully completing the training curriculum. Certified Waste Watchers will then be responsible for completing a certain number of actions each quarter to maintain certification. These actions can include hosting a presentation on how to correctly recycle, hosting a block cleanup using Zero Waste principles, or volunteering at an event where Waste Watchers have been requested.

## Future Plans

Aside from the desire to clean up litter and reduce waste, the Cabinet also understands that added incentives would encourage participation in these programs. As such, the Cabinet has the great opportunity to be working with the Recyclebank Program as Recyclebank rebrands itself under the Waste Watchers Program.

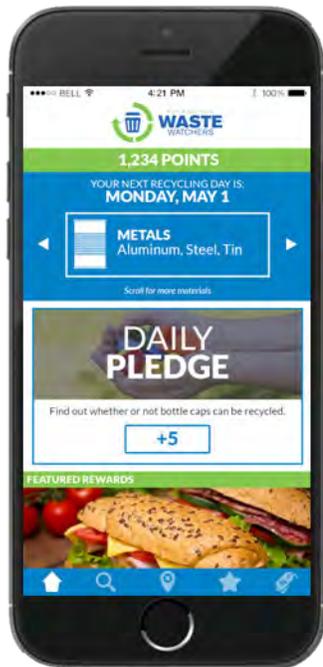
## Waste Watchers



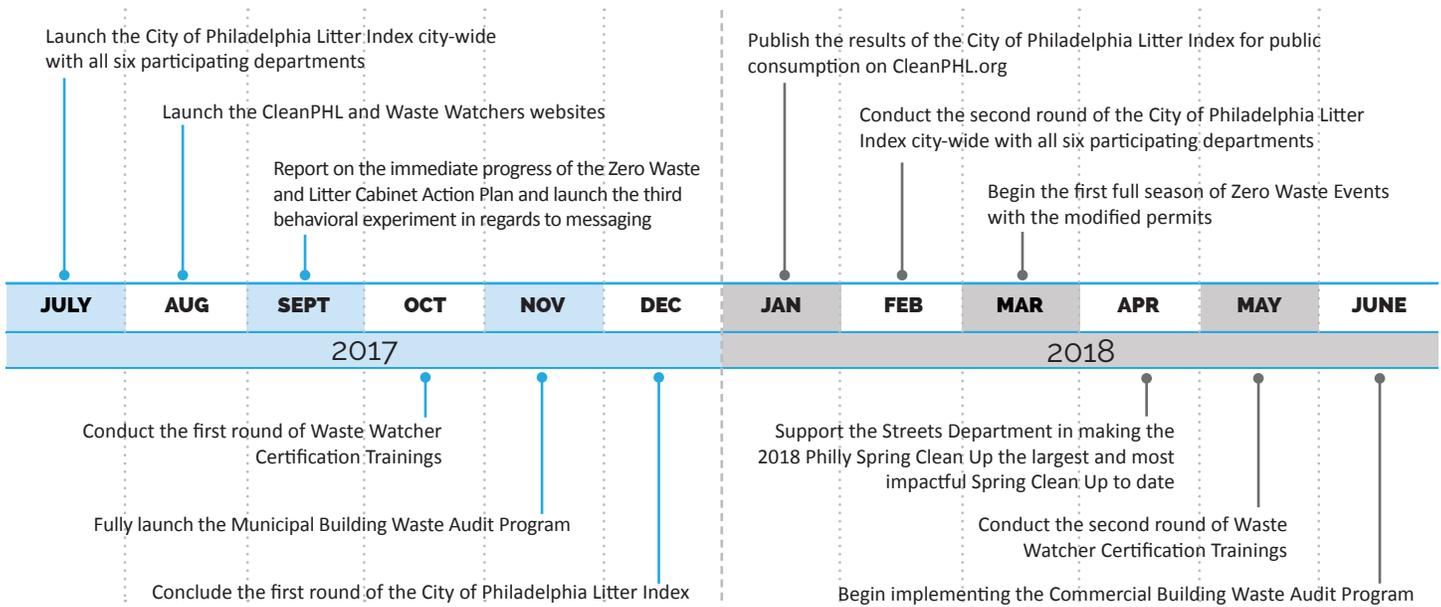
Recyclebank began their partnership with the Streets Department in 2007 as single stream recycling was launched. This partnership produced the successful Recycling Rewards Program, which provides residents with points for recycling as well as educational opportunities such as online quizzes. Recyclebank will be expanding these incentives and educational opportunities to incorporate many other aspects of Zero Waste, such as single stream recycling and community composting. Utilizing their well-developed web and mobile platforms, Recyclebank will expand these opportunities for their existing users and will reward users who participate with incentives such as discounts to restaurants and retail stores for earning points.

In addition to expanding these programs, Recyclebank will also take on the marketing, messaging, and incentives decision-making for the Waste Watchers Program to assist in the certification and tracking of Waste Watcher actions. By providing opportunities for passive users to earn points for one-off actions or to become fully-certified Waste Watchers, our hope is that this partnership will be able to engage as many Philadelphians as possible in making Philadelphia one of the cleanest and greenest cities in America and put us on a path to Zero Waste by 2035.

Both of these initiatives will have robust social media presences that will rely on aggregating and sharing content across City departments and other stakeholders involved in the Cabinet. The Communications and Engagement and Waste Reduction and Diversion Subcommittees will also develop a Zero Waste webpage that will contain information and materials related to Zero Waste efforts in Philadelphia, such as the city-wide waste diversion rate, Waste Audit Guide and Guide to Zero Waste Events, reporting forms, and links to information about how to become a Waste Watcher.



## First Year Timeline



## Next Steps for the Future

This action plan was designed to create a road map for Philadelphia to secure a litter-free future with the ongoing goal of Zero Waste, as defined through this plan’s Zero Waste policy objective, by 2035. However, the membership of the Cabinet understands that many aspects of this plan, especially in regards to Zero Waste, are contingent on local, state, national, and international factors. As many of these conditions are beyond the City’s sole control, it is challenging to set firm deadlines for achieving every single long-term policy objective mentioned in this plan.

Nevertheless, by setting the goals outlined in this report, the City of Philadelphia now has a clearly defined target and aspiration against which it can evaluate its operational, policy, and regulatory decisions going forward. As per Executive Order 13-16, the Cabinet is responsible for preparing an annual progress report every September that reports on the outcomes of the previous fiscal year’s progress toward accomplishing the action plan’s objectives while also determining the major initiatives of the action plan to be accomplished in the following fiscal year. To initiate this process, the Cabinet would like to take the opportunity to define the actions that it plans to accomplish in Fiscal Year 2018, which are outlined in the timeline above.

**Appendix A**  
**Appendix B**  
**Appendix C**

# Appendix A

Municipal Building Waste Audit Program  
Digital Reporting Form



## Philadelphia Municipal Building Waste Audit

### PART 1: MANDATORY REPORTING

#### Facility and Contact Information

Property Name

\_\_\_\_\_

City Department

\_\_\_\_\_

Property Address

Street Address

\_\_\_\_\_

Street Address Line 2

\_\_\_\_\_

City

\_\_\_\_\_

Postal / Zip Code

\_\_\_\_\_

Manager Name

First Name

Last Name

\_\_\_\_\_

Manager Phone Number

Area Code

Phone Number

\_\_\_\_\_

Manager E-mail

\_\_\_\_\_

Contact Name (Survey Respondent)

First Name

Last Name

\_\_\_\_\_

Contact Phone Number

Area Code

Phone Number

\_\_\_\_\_

Contact E-mail

\_\_\_\_\_

Property Type (Please check at least one.)

- |  |  |
|--|--|
| <input type="checkbox"/> Office              | <input type="checkbox"/> Library                 |
| <input type="checkbox"/> Museum              | <input type="checkbox"/> Public Utility Facility |
| <input type="checkbox"/> Storage Facility    | <input type="checkbox"/> Maintenance Facility    |
| <input type="checkbox"/> Recreation Facility | <input type="checkbox"/> Courthouse              |
| <input type="checkbox"/> Police Station      | <input type="checkbox"/> Post Office             |
| <input type="checkbox"/> Prison              | <input type="checkbox"/> Warehouse               |

(Other)

\_\_\_\_\_

**What types of materials does this premises generate? Please check all that apply.**

- Solid Waste (Trash)
- Single Stream Recycling (Could include #1-#7 plastic containers, aluminum and steel cans, glass bottles and jars, office paper, cardboard, and aseptic cartons)\*
- Electronic Waste (Computers, monitors, phones, and other electronics)\*
- Source Separated Recycling (Could include any of the single stream materials listed above and/or organic waste)
- Waste Cooking Oil\*
- Used Motor Oil\*
- Universal Waste (fluorescent bulbs, batteries, pesticides, etc.)\*
- Hazardous Waste (solvents, oil-based paint, etc.)\*
- Medical Waste\*
- Construction and Demolition (C&D) Debris

\*These materials are mandated by state and/or municipal law to be recycled and/or disposed of properly according to industry-specific regulations.

**Please fill out the section below to provide information about the service providers collecting materials from your premises. If your facility does not generate a particular material, leave that row blank.**

	<u>Name of Service Provider (Hauler)</u>
Solid Waste (Trash)	_____
Single Stream Recycling	_____
Electronic Waste	_____
Source Separated Recycling	_____
Waste Cooking Oil	_____
Used Motor Oil	_____
Universal Waste	_____
Hazardous Waste	_____
Medical Waste	_____
Construction and Demolition (C&D) Debris	_____

Do you need to find a hauler for one of the above listed materials? [Visit the haulers list to find a Philadelphia hauling company.](#)

**What challenges is your organization facing in trying to reduce waste and increase recycling at your facility? Please use this space to identify any barriers your organization faces. These comments will be used to inform future recycling efforts in Philadelphia.**

**You have now completed the mandatory section of the Municipal Building Waste Audit form. Please click through the form's remaining pages and consider completing the optional Zero Waste Reporting section before submitting. If you would like to skip the Zero Waste Reporting section, you can now print or submit your form.**

## **PART 2: ZERO WASTE REPORTING (OPTIONAL)**

The City of Philadelphia is working toward becoming a Zero Waste and litter-free city. With this initiative, we are encouraging City departments to reduce waste and increase recycling at their facilities. [Visit the Philadelphia Waste Audit Guide](#) to learn about how you can reduce your property's trash, separate materials for recycling, and identify opportunities to divert waste away from landfills.

In this section, you have the option of reporting on your management practices for additional materials that your facility may recycle or donate. By completing this portion of the form, you can develop a better idea of the composition of your property's waste stream and benchmark its current waste diversion rate — the amount of waste being diverted from landfill and incineration through recycling, composting, and donations.

This section is designed to help you determine how much waste your facility generates to more easily understand opportunities for recycling and waste diversion. Reducing trash and increasing recycling and donations can help you prevent valuable resources from entering landfills and can bring you closer to becoming a [Philadelphia Zero Waste Partner](#). If you are looking to become or maintain status as a Zero Waste Partner, you must fill this form out monthly. Submit your form for a particular month by the last day of the following month. (For example, submit your form for August by September 30).

**Does your facility separate and recycle or donate any of the following materials? Please check all that apply.**

- |  |   |
|--|---|
| <input type="checkbox"/> Food Waste              | <input type="checkbox"/> Yard and Leaf Waste            |
| <input type="checkbox"/> Polystyrene (Styrofoam) | <input type="checkbox"/> Plastic Bags                   |
| <input type="checkbox"/> Wood                    | <input type="checkbox"/> Metal                          |
| <input type="checkbox"/> Clothing                | <input type="checkbox"/> Edible, Unopened Packaged Food |

### **Estimate Your Facility's Monthly Waste Diversion Rate**

In this section, report on the amount of material your facility generates to estimate your facility's monthly waste diversion rate. Much of the information needed to complete the form may be found on your service provider invoices. If your service provider invoices for a particular material list the number of tons collected per month, please enter that number into the "Tons Collected per Month" column in the matrix below.

If you cannot obtain this information from your service provider invoices, use the Philadelphia Waste Generation Calculator Tool ([Microsoft Excel file](#) or [Google Sheets document](#)) to estimate the number of tons of each material your facility generates using information about your current levels of collection service. Follow the instructions in the calculator tool to fill out the matrix below.

*(NOTE: "Medical Waste" and "Edible, Unopened Packaged Food" are not included in the calculator tool. It is likely that your service providers will provide weights for these materials, which you can enter directly into the matrix below.)*

If you know the number of pounds of a certain material generated, type that number into the "Type Number of Pounds Here" field below to convert into tons before filling out the matrix.

**Type Number of Pounds Here:** \_\_\_\_\_ Pounds **Is Equal to:** \_\_\_\_\_ Tons

**Reporting Month (What month is this data for?)**

\_\_\_\_\_  
Month Year

Tons Collected per Month	Name of Service Provider (Hauler)	Instructions
Solid Waste (Trash)		<p>Please fill out the matrix using your service provider invoices and/or the Waste Generation Calculator Tool. If your facility does not generate a particular type of waste, leave that row blank.</p> <p>If your facility source separates and recycles materials not included in this list, please enter the information related to those materials in the last two rows of the matrix and use the fields below the matrix to identify those additional materials. The data entered in the matrix will be used to estimate your facility's overall waste diversion rate before you submit the form.</p> <p><i>(Enter values from Waste Generation Calculator Tool here).</i></p>
Hazardous Waste		
Medical Waste		
Single Stream Recycling		
Electronic Waste		
Waste Cooking Oil		
Used Motor Oil		
Universal Waste		
Construction & Demolition (C&D) Debris		
Food Waste		
Yard and Leaf Waste		
Polystyrene (Styrofoam)		
Plastic Bags		
Wood		
Metal		
Clothing		
Edible, Unopened Packaged Food		
Additional Material 1		
Additional Material 2		
<b>Additional Material 1 (if applicable)</b>	<b>Additional Material 2 (if applicable)</b>	
Name any additional materials you listed above.	Name any additional materials you listed above.	

**Your Facility's Waste Diversion Rate. Based on data entered above. Do not enter any information here.**

Your facility's diversion rate is calculated by dividing the weight of material diverted by the overall amount of material generated.

**What challenges is your organization facing in trying to reduce waste and increase recycling and donations at your facility as you strive toward Zero Waste? Please use this space to identify any barriers your organization faces and/or to provide feedback on the Zero Waste reporting process. These comments will be used to inform future Zero Waste efforts in Philadelphia.**

**Thank you for completing the Municipal Building Waste Audit form. Please review your responses before submitting.**



# Appendix B

Zero Waste Events Program  
Digital Reporting Form



## Zero Waste Events Waste Diversion Report

The City of Philadelphia is working toward becoming a Zero Waste and litter-free city. With this initiative, we are encouraging reduced waste generation and increased recycling at special events. [Visit the Philadelphia Guide to Zero Waste Events](#) to learn about how you can reduce your event's trash, separate materials for recycling and composting, and identify additional opportunities to divert waste away from landfills. Reducing trash and increasing recycling and donations from your event can help to prevent valuable resources from entering landfills and can bring you closer to becoming a [Philadelphia Zero Waste Event Partner](#).

Use this form to estimate and report on your event's waste diversion rate — the amount of waste that your event diverted away from landfill and incineration through recycling, composting, and donations.

### Event and Contact Information

**Event Name**

---

**Event Start Date and Time**

---

Month

Day

Year

Time

**Event End Date and Time**

---

Month

Day

Year

Time

**Event Type (Please check at least one.)**

- Athletic Event (Marathon or other run, walkathon, bike race, etc.)
- Concert/Music Event
- Fundraiser/Charitable Event
- Parade
- Street Festival
- Community Event

\_\_\_\_\_ (Other)

**Event Location**

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City

\_\_\_\_\_  
Postal / Zip Code

**Did your event start at one location and end at another?**

- Yes                       No

**Event End Location (if event started at one location and ended at another)**

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City

\_\_\_\_\_  
Postal / Zip Code

**Organization Name**

\_\_\_\_\_  
What particular department, organization, business, or community group held the event?

**Contact Name**

\_\_\_\_\_                      \_\_\_\_\_  
First Name                      Last Name

**Contact Phone Number**

\_\_\_\_\_                      \_\_\_\_\_  
Area Code                      Phone Number

**Contact E-mail**

\_\_\_\_\_

**Contact/Organization Address**

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
Street Address Line 2

\_\_\_\_\_  
City

\_\_\_\_\_  
State / Province

\_\_\_\_\_  
Postal / Zip Code

**Estimated # of Event Participants**

**Estimated # of Spectators (if applicable)**

\_\_\_\_\_

\_\_\_\_\_

**Event Waste Diversion Practices**

**What types of materials were generated at your event and recycled or donated? Please check all that apply.**

- Single Stream Recycling (Could include #1-#7 plastic bottles and containers, aluminum and steel cans, glass bottles and jars, office paper, cardboard, and aseptic cartons)
- Food Waste
- Electronic Waste (Computers, monitors, phones, and other electronics)
- Wood
- Metal
- Polystyrene (Styrofoam)
- Excess Food Donations
- Clothing Donations

\_\_\_\_\_  
(Other)

**Estimate and Report Your Event's Waste Diversion Rate**

In this section, report on the amount of material generated, recycled, and donated at your event. This information will be used to estimate your event's waste diversion rate. Much of the information needed to complete the form may be found on your service provider invoices. If your service provider invoice for a particular material lists the number of tons collected, please enter that number into the "Tons Collected from Event" column in the matrix below.

If you cannot obtain this information from your service provider invoices, use the Zero Waste Events Waste Generation Calculator Tool ([Microsoft Excel file](#) or [Google Sheets document](#)) to estimate the number of tons of each material that were recycled and/or donated from your event. Follow the instructions in the calculator tool to complete the section below. **(NOTE: "Excess Food Donations" is not included in the calculator tool. It is likely that the food donation entity will provide a weight for donated food, which you can enter directly into the matrix below.)**

If you know the number of pounds of a certain material generated at your event, type that number into the "Type Number of Pounds Here" field below to convert into tons before filling out the matrix.

**Type Number of Pounds Here:** \_\_\_\_\_ **Pounds** **Is Equal to:** \_\_\_\_\_ **Tons**

<u>Tons Collected from Event</u>	<u>Name of Service Provider</u>	<u>Instructions</u>
Solid Waste (Trash) _____	_____	<p>Please fill out the matrix using your service provider invoices and/or the Zero Waste Events Waste Generation Calculator Tool. If your event did not generate a particular type of waste, leave that row blank.</p> <p>The data entered here will be used to estimate your event's overall waste diversion rate before you submit the form. If additional materials to those listed here were separated and recycled, please enter the information related to those materials in the last two rows of the matrix and use the fields below the matrix to identify those additional materials.</p>
Single Stream Recycling _____	_____	
Food Waste _____	_____	
Electronic Waste _____	_____	
Wood _____	_____	
Metal _____	_____	
Polystyrene (Styrofoam) _____	_____	
Excess Food Donations _____	_____	
Clothing Donations _____	_____	
Additional Material 1 _____	_____	
Additional Material 2 _____	_____	

**Additional Material 1 (if applicable)**

**Additional Material 2 (if applicable)**

\_\_\_\_\_  
Name any additional materials you listed above.

\_\_\_\_\_  
Name any additional materials you listed above.

**Your Event's Waste Diversion Rate. Calculated based on data entered above. Do not enter any information here.**

\_\_\_\_\_  
Your event's diversion rate is calculated by dividing the weight of material diverted by the overall amount of material generated.

**What challenges is your organization facing in trying to reduce waste and increase recycling and donations at events as you strive toward Zero Waste? Are there additional resources or tools the City could provide to help improve waste diversion from events? Please use this space to identify any barriers your organization faces and/or to provide feedback on the Zero Waste Events reporting process. These comments will be used to inform future Zero Waste efforts in Philadelphia.**

**Thank you for completing the Zero Waste Events Waste Diversion Reporting form. Please review your responses before submitting.**

# Appendix C

## Litter Enforcement & Cleaner Public Spaces Recommendations

### Litter Enforcement: Short-term Priorities

#### Short-term Enforcement Recommendation 1: Improve Tire Regulation and Enforcement

- **Can we do it?**
  - State law currently mandates that all waste tire haulers have a waste tire hauler authorization number and maintain a record of tires hauled and its disposal methods.
  - A local ordinance can also be enacted to require any business that buys or sells tires to maintain a manifest to track the tires received and disposed of. These requirements are similar to those already in effect for pawnbrokers.
  - According to the City of Philadelphia's Department of Licenses and Inspection (L&I), a robust tire enforcement program will likely require two inspectors and two vehicles.
- **Will it work?**
  - A local ordinance requiring businesses that purchase or sell tires to maintain records of the tires they receive and dispose of will allow L&I to better identify discrepancies between these records and the records required by state law for waste tire hauler disposal.
  - A local ordinance that allows the City to take legal action against tire haulers and tire dealers where this discrepancy occurs will help improve enforcement for improper tire disposal.
- **Is it worth it?**
  - The City of Philadelphia collected 132,100 tires in 2016.<sup>10</sup>
  - The Streets Department paid \$124,592 in 2016 to dispose of tires.<sup>11</sup>
  - Improperly dumped tires are toxic, unsightly, and pose significant environmental problems.

#### Short-term Enforcement Recommendation 2: Include Construction and Demolition Waste Plans on All L&I Construction, Demolition, and Alterations Permits

- **Can we do it?**
  - L&I regulations currently require all City-sanctioned, large-scale demolition projects to report information on waste haulers and tonnages. However, this requirement does not presently apply to all permits for construction, demolition, or alteration work.
  - When applying for a permit, a developer or contractor would have to identify its hauler and would be required to maintain disposal receipts during and after the work.
  - Establishing this requirement would require an ordinance from City Council.
- **Will it work?**
  - Requiring this information at the time of permit application will set a standard that waste management must be a priority for these projects from the outset, rather than an afterthought.
  - This information will create a paper trail that departments can follow should there be evidence of improper waste disposal or an unkempt work site.
  - This information will allow City departments to flag waste disposal operators or companies that have been convicted of illegal dumping.
- **It is worth it?**
  - In 2016, Streets and CLIP cleaned up more than 1,000 heavy short dumps, equaling more than 13,000 tons of debris at a cost exceeding \$8 million when estimated using Keep Pennsylvania Beautiful's metric of \$619 per ton for cleaning up illegal dumping.<sup>12</sup>

<sup>10</sup> Streets Department, City of Philadelphia. Annual Report. 2016. Raw unpublished data.

<sup>11</sup> Ibid.

<sup>12</sup> Ibid.

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### Short-term Enforcement Recommendation 3: Coordinate and Improve Short Dumping Surveillance

- **Can we do it?**
  - The City currently has a camera system that can be used to monitor known problem spots for illegal dumping. The City of Philadelphia Litter Index will help City officials identify additional problem areas to deploy cameras.
  - An increasing number of residents and businesses are installing private cameras and linking them to the police system.
  - With so many cameras set up throughout the city, a coordinated system is needed for retrieving footage from cameras when short dumping occurs based on reports from residents, businesses, and City staff.
- **Will it work?**
  - Short dumpers can only be prosecuted with sufficient evidence such as a police video, arrest, or photo evidence.
  - Keep Pennsylvania Beautiful has provided specifications for the quality of cameras and set-up needed to capture license plates with a timestamp which are critical pieces of information for successful prosecution.
- **Is it worth it?**
  - Successful prosecution of illegal dumping is critical for deterring this behavior.
  - Cleaning up illegal dumping presents significant financial costs to taxpayers. Keep Pennsylvania Beautiful estimates that short dumping on average costs municipalities \$619 per ton to remediate, which equates to more than \$8 million based on the tonnages cleaned up by Streets and CLIP alone.<sup>13</sup>

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### Short-term Enforcement Recommendation 4: Increase Fines for Short Dumping

- **Can we do it?**
  - Civil penalties for dumping debris and short dumping can be established by ordinance. Legislation is pending in City Council to increase these fines, from \$300 to up to \$2,000.
- **Will it work?**
  - Fines must be sufficiently expensive to provide a meaningful deterrent. If the fine is less than the cost of doing business legitimately, the fine will not effectively discourage illegal dumping.

- **Is it worth it?**
  - Increasing fines by ordinance does not present any meaningful cost to the City, yet can generate additional revenue and discourage bad behavior when properly enforced.
  - These fines have not been increased since the 1980s. Increasing fines will send a message that Philadelphia is aggressively addressing illegal dumping.

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### Short-term Enforcement Recommendation 5: Impose Mandatory Community Service Hours For Short Dumping Diversion Programs

- **Can we do it?**
  - Currently, a majority of criminal short dumping violations are treated as misdemeanors.
  - Many misdemeanor offenders are eligible for diversion programs titled Accelerated Misdemeanor Program (AMP) 1 and AMP 2, which often require community service to be performed.
  - The District Attorney has the authority to establish a policy to request that judges require short dumping offenders participating in diversion programs to perform community service hours cleaning up illegal dumping and performing other beautification work with CLIP.
- **Will it work?**
  - Systematically requiring short dumping offenders to clean up illegally dumped trash would provide tangible physical benefits in the form of a cleaner city while hopefully discouraging this behavior in the future.
  - Requiring non-violent offenders to perform community service cleaning up the city instead of serving a jail sentence is consistent with the Kenney Administration's goal of diverting nonviolent offenders from prison.
- **Is it worth it?**
  - Requiring community service will provide a meaningful deterrent that will hopefully change behavior while also helping to clean up the city.
  - When coupled with other penalties such as increased fines, vehicle seizure, and/or liens that disrupt doing business, behavior will hopefully change and result in less illegal dumping in the future.

### Short-term Enforcement Recommendation 6: Impose Seizure and/or Forfeiture of Vehicles Involved in Short Dumping Crimes

- **Can we do it?**
  - The Philadelphia Code and state law currently permit vehicles to be seized when used to commit illegal short dumping.
  - The Law Department and District Attorney's Office can aggressively seek forfeiture to be imposed when appropriate.
- **Will it work?**
  - The forfeiture of a vehicle is a significant deterrent and will remove the primary means used by the offender to commit the crime.
- **Is it worth it?**
  - This remedy could be used against the most egregious or frequent offenders who have not been deterred by fines or community service.

### Short-term Enforcement Recommendation 7: Increase and Streamline Illegal Dumping Cases in Court System

- **Can we do it?**
  - These cases refer to misdemeanor offenses, not summary offenses, that will result in diversion programs, Licenses and Inspections Administrative Hearings, or fines and other penalties such as vehicle forfeiture.
  - The Cabinet's goal will be to bring 20 illegal dumping cases to court per quarter. In 2016, despite the fact that the Streets Department cleaned up 921 short dumps and CLIP investigated 128 cases of short dumping, just 12 short dumping cases were charged as misdemeanors.<sup>14 15</sup>
- **Will it work?**
  - By streamlining illegal dumping cases, the District Attorney's Office and Licenses and Inspections can better ensure that consistent fines, community service, administrative penalties, and vehicle forfeiture penalties are sought.
  - With a higher volume of cases being prosecuted in a streamlined manner, it may be easier to encourage witnesses and businesses with evidence from cameras to go to court.

- **Is it worth it?**
  - With over 1,000 short dumping cases reported between the Streets Department and CLIP in 2016, there is a sufficient volume of offenses to increase this caseload, provided that enough evidence can be gathered to prosecute them.<sup>16 17</sup>
  - Streamlining cases will lead to better tracking and more consistent and efficient prosecution.
  - Prioritizing these cases will also create a heightened level of priority for this crime.

### Short-term Enforcement Recommendation 8: Coordinate Education and Enforcement of the Requirements of the Waste Bin Law for All Commercial Establishments Selling Prepared or Prepackaged Food

- **Can we do it?**
  - Section 10-704 of the Code requires all commercial establishments selling prepared or prepackaged food for takeout or consumption off premises to provide trash and recycling receptacles near their entrance.
  - Section 46-881 of the Health Department Regulations Governing Food Establishments sets standards for how this trash storage should be developed and maintained.
  - SWEEP, CLIP, L&I, and the Department of Public Health all have enforcement capabilities to increase compliance.
- **Will it work?**
  - This law requires businesses that sell products that often contribute to litter problems to provide and maintain public realm trash cans to help ensure that customers have the opportunity to properly dispose of waste.
  - To encourage compliance, the Commerce Department can develop materials explaining these laws and tips for compliance to all new prepared or prepackaged food establishments.
  - City enforcement officers (from SWEEP, L&I, and Health) can be specifically trained to enforce this requirement more consistently.
- **Is it worth it?**
  - Improved compliance with this requirement could substantially increase the amount of public trash cans in the city with little cost to City resources.
  - Food containers and packaging continue to make up a majority of litter on Philadelphia's streets. Improving the availability of receptacles could substantially reduce the amount of litter.

<sup>14</sup> CLIP, City of Philadelphia. Annual Report. 2016. Unpublished raw data.

<sup>15</sup> Streets Department, City of Philadelphia. Annual Report. 2016. Unpublished raw data.

<sup>16</sup> Ibid.

<sup>17</sup> CLIP, City of Philadelphia. Annual Report. 2016. Unpublished raw data.

### Short-term Enforcement Recommendation 9: Increase Zoning Code Enforcement of Interior Trash Storage for New Construction or Variances

- **Can we do it?**
  - The Zoning Code already requires that new commercial and residential construction have adequate indoor trash storage.
  - Registered Community Organizations can be educated to be vigilant about this requirement when evaluating development proposals, and the Zoning Board of Adjustment can more consistently enforce this requirement on development matters that come before it.
- **Will it work?**
  - Inadequate indoor trash storage encourages many people who live in multi-family dwellings to improperly dispose of their household trash in public trash cans.
  - Inadequate commercial indoor trash storage also leads to a proliferation of dumpsters.
  - Ensuring that new construction has adequate indoor trash storage will help alleviate the problems of household dumping and improper set outs.
- **Is it worth it?**
  - In 2016, Philadelphia had 5,688 reports of illegal dumping and 2,384 reports of improper set outs.<sup>18</sup>
  - Having more indoor trash storage could reduce the more than 8,000 service requests the City received in 2016 for waste mismanagement issues, as well as specifically reduce occurrences of improper dumping of household waste at overflowing public trash cans.<sup>19</sup>

### Short-term Enforcement Recommendation 10: Identify and Enforce Dumpster-Free Streets

- **Can we do it?**
  - City departments can develop a list of streets that could be dumpster-free based on a set of criteria. This list can then inform the licensing and approval process for new dumpsters in the public right-of-way.
  - An ordinance or change to Streets Department regulations would be needed to enforce.
- **Will it work?**
  - By having dumpster-free streets, the width of the public right-of-way can be maintained, the appearance of the streetscape can be improved, and unsanitary conditions that affect other neighboring businesses can be alleviated.

- **Is it worth it?**
  - Cleaner commercial corridors are good for business. A Morpace Marketing Research study found that 52% of shoppers will avoid a business if the facade or entrance is dirty or unappealing.<sup>20</sup>
  - Fewer dumpsters may create a stronger and more appealing retail business climate on these streets.
  - In 2016, there were 184 service requests submitted to 311 for dumpster maintenance issues.<sup>21</sup>

### Short-term Enforcement Recommendation 11: Increased Enforcement and Education on Improper Waste Set Outs

- **Can we do it?**
  - SWEEP Officers issued 2,834 improper set out violations in 2016.<sup>22</sup>
  - SWEEP currently conducts education campaigns on improper set outs.
  - CDCs and the Commerce Department educate commercial properties on improper set outs.
  - The Waste Watchers 2.0 program will be built to increase resident-to-resident education on improper set outs.
  - More multilingual information is needed for residents and businesses on how to properly set out trash and recycling.
- **Will it work?**
  - Stronger enforcement efforts will lead to additional engagement opportunities to educate and inform community members.
- **Is it worth it?**
  - Improper set outs greatly affect Streets Department operations and contribute to littered conditions on trash pickup day.
  - Expanding education about proper set outs also presents an opportunity for expanded education about waste and recycling practices more generally.

### Short-term Enforcement Recommendation 12: Increase Enforcement of \$300 Moving Violation for Throwing Trash Out of a Window

- **Can we do it?**
  - State law currently authorizes all police (state and municipal) to issue \$300 fines for throwing trash out of a car window when the car is moving.
  - In 2016, Philadelphia Police issued 99 tickets for this violation.<sup>23</sup>

- **Will it work?**
  - This moving violation is attached to a person's driver's license, which makes tracking and collection easier.
  - Police already have the legal authority to issue these violations.
- **Is it worth it?**
  - As preliminary litter indexing has shown, as well as observations of highway conditions, litter accumulates in great concentrations along non-residential highways. Increasing these tickets can send a message that this behavior will not be tolerated in Philadelphia.

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### Short-term Enforcement Recommendation 13: Mandate That All Circulars are Designed as Door Hangers

- **Can we do it?**
  - Legislation can amend an existing ordinance to require that all circulars, whether they consist of one sheet of paper or a collection of papers in a bag, be designed as a door hanger and require they be hung by the distributor at each property.
  - This ordinance would exempt Registered Community Organizations (RCOs) that pass out zoning materials and other appropriate and sanctioned community-based flyers.
- **Will it work?**
  - If a circular is affixed to a door, it will help prevent the paper from blowing away and becoming litter.
  - These requirements would force a distributor to walk to the door rather than carelessly dump the circular on steps.
- **Is it worth it?**
  - Much of the litter observed on neighborhood streets is circulars, and preventing this waste would greatly enhance cleanliness.

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### Short-term Enforcement Recommendation 14: Revise Section 9-604 (5)(6)(7)(8) of the Philadelphia Code Regarding Hauler Reporting

- **Can we do it?**
  - Section 9-604(5)(6)(7)(8) of the Philadelphia Code currently licenses collection vehicles, which mandates waste haulers to report tonnages.
  - This ordinance was preempted by Act 90 of 2010 which states, "No municipality may implement a municipal waste or residual waste transportation authorization or licensing program after the effective date of this chapter."

- An ordinance would be needed to create a business activity license in Philadelphia specific for the activity of private waste hauling, which could then regulate the reporting of tonnages in accordance with ACT 90 of 2010 and Act 101 of 1988.
- **Will it work?**
  - Many haulers already voluntarily report information about their tonnages.
  - This business license can also be used to help ensure that haulers are following municipal law by picking up recycling, in addition to trash, from businesses.
- **Is it worth it?**
  - Measuring progress toward a Zero Waste goal will be virtually impossible without making sure that commercial haulers are consistently reporting their tonnages.

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## Litter Enforcement: Long-term Priorities

### Long-term Enforcement Recommendation 1: Create a Formalized Environmental Crimes Unit Within the Philadelphia Police Department (PPD) Neighborhood Services Unit

- **Can we do it?**
  - An Environmental Crimes Unit was started under Mayor Goode and absorbed into Neighborhood Services by Mayor Street.
  - The PPD currently dedicates officers in Neighborhood Services to work solely on investigating and conducting surveillance of illegal dumping on City vacant and natural lands.
  - By rebranding these officers as the Environmental Crimes Unit within Neighborhood Services, and adding additional officers to the Unit, the PPD could increase the number of arrests in response to the more than 1,000 reports of short dumping made annually.
- **Will it work?**
  - Philadelphia has more than 10,000 acres of natural areas and nearly 27,000 vacant lots.<sup>24</sup> Having an increased police detail solely focused on Environmental Crimes in these areas will lead to stronger enforcement and hopefully fewer occurrences of illegal dumping.
  - Designation of an Environmental Crimes Unit would allow other officers in Neighborhood Services to more directly focus on other quality of life issues in the neighborhoods.

22 Streets Department, City of Philadelphia. Annual Report. 2016. Unpublished raw data.

23 Municipal Court Traffic Division, City of Philadelphia. Annual Report. 2016. Unpublished raw data.

24 Department of Planning and Development, City of Philadelphia. Internal data. 2017. Raw unpublished data.

- **Is it worth it?**
  - Expanding this team will allow the PPD to increase surveillance, thereby increasing evidence and leading to more successful prosecutions of crimes like short dumping.
  - Branding the unit “Environmental Crimes” puts emphasis on the larger ecosystem affected by illegal dumping and litter.

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### Long-term Enforcement Recommendation 2: Develop Monthly Code Violation Notice (CVN) Reports for Issuing Departments

- **Can we do it?**
  - The Office of Administrative Review’s (OAR) E-TIMS System currently collects data on every CVN issued by City departments and agencies.
  - OAR can use E-TIMS to pull Monthly Data Reports that can be sent to CVN-issuing departments to track how many CVN’s are being issued, for which specific offenses, in various geographic areas.
  - This data is public and can be incorporated into Open Data for 311 to be able to compare with Public Safety data.
- **Will it work?**
  - Providing this monthly report will allow specific agencies to better analyze the effectiveness of enforcement efforts and identify gaps between enforcement efforts and complaints.
- **Is it worth it?**
  - By coordinating this information, departments can ensure that staff time and department resources are being used as efficiently as possible.
  - This information already exists and would not require a significant increase of resources or system upgrades to accomplish.

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### Long-term Enforcement Recommendation 3: Ban Plastic Bags

- **Can we do it?**
  - A fee had been proposed in City Council in 2009 but was not successful. A ban has not yet been attempted in Philadelphia.
  - The City of Portland, the State of Hawaii, and the City of San Francisco have implemented full bans.
  - Legislation to ban plastic bags is pending in other cities and states.

- **Will it work?**
  - A University of New Hampshire study found that a ban was much more effective than a fee for taking plastic bags out of the waste stream and preventing them from becoming litter. In jurisdictions that implemented fees and bans, studies have shown one-time consumer bag usage decreased by as much as 80 percent.<sup>25</sup>
  - A fee is more burdensome to collect and enforce than an outright ban.
- **Is it worth it?**
  - Plastic bags are one of the most widely distributed and frequently littered items in the modern economy. Last year, more than 900 million plastic bags were distributed in Philadelphia.<sup>26</sup>
  - The Water Department found that plastic bags comprise 17% of all floatables found in Philadelphia’s waterways. Additionally, the city’s recycling plant reports that plastic bags cause multiple plant shutdowns every day, which required 12,240 staff hours in 2016 to remove plastic bags from cleaning screens and machinery.<sup>27</sup>
  - Although plastic bags are generally less expensive than paper, paper bags decompose outdoors in a month while plastic bags take between 200 and 1,000 years to break down and never fully decompose.<sup>28</sup>

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### Long-term Enforcement Recommendation 4: Coordinate Commercial Waste Pick Ups with Commercial Waste Haulers

- **Can we do it?**
  - Some cities have established zoned franchises for commercial waste haulers, with haulers bidding competitively to service the zones. However, Act 90 poses legal challenges for Philadelphia to do so.
  - The vast majority (80 percent) of commercial trash in Philadelphia is picked up by just four companies.<sup>29</sup>
  - The City can achieve some of the benefits of a franchised system by partnering with the four main haulers, as well as other haulers that would want to participate, to create voluntary coordinated pick up schedules to reduce collection truck traffic.
- **Will it work?**
  - This partnership will alleviate congestion, fossil fuel use, and inefficiencies, as multiple companies pick up from multiple nearby locations on a daily basis.
  - This partnership could help the City collect better data and create management standards to increase recycling rates and participation.

<sup>25</sup> “The Ubiquitous Plastic Bag - And What To Do.” BioCycle. September 15, 2016. Accessed June 19, 2017. <https://www.biocycle.net/2016/08/15/ubiquitous-plastic-bag/>.

<sup>26</sup> Mike Dunn quoted in “PA House bill sacks ability of municipalities to regulate plastic bags.” City and State Pennsylvania. April 27, 2017. <http://www.cityandstatepa.com/content/pa-house-bill-sacks-ability-municipalities-regulate-plastic-bags>.

<sup>27</sup> Ibid.

<sup>28</sup> “Plastic Bags vs paper Bags.” International Plastics. <http://www.interplas.com/packaging-earth-friendly-recyclable-plastic-bags>.

<sup>29</sup> Streets Department, City of Philadelphia. Annual Report. 2016. Unpublished raw data.

- **Is it worth it?**
  - A New York City-commissioned study found that coordinating commercial waste pick ups could reduce truck traffic on city streets by 42 percent to 68 percent, as well as reduce greenhouse gas emissions by 42 percent to 64 percent.<sup>30</sup>

### Long-term Enforcement Recommendation 5:

#### Create a 311 “Street Trash” Ticket

- **Can we do it?**
  - From January 1, 2016 to April 17, 2017, Philly 311 recorded 5,688 Illegal Dumping service requests.<sup>31</sup>
  - In a one month period, a keyword search found that 66 percent of the time the term used in the request was “Short Dumping,” and 33 percent of the time the term used was “Street Trash.”<sup>32</sup>
- **Will it work?**
  - Many times, the term “Illegal Dumping” can be too broad, and unless the Service Request specifies the type of dumping, the responding operating department does not know the severity of what they are responding to. Creating this Street Trash Ticket will allow Philly 311 service requestors to better detail and differentiate a short dump of large debris from trash that is left on the street.
- **Is it worth it?**
  - By providing the specificity of short dumps from trash on the street, responding operating departments will more efficiently manage their resources and more effectively execute their duties, thus saving the City money and better servicing residents.
  - The creation of a “Street Trash” ticket will also provide more specific data collection for 311, Streets, and CLIP.

### Long-term Enforcement Recommendation 6:

#### Improve Coordination with Scrap Yard Task Force

- **Can we do it?**
  - The Scrap Yard Task Force is coordinated by the Water Department and includes state and municipal enforcement agencies and departments.
  - The Scrap Yard Task Force investigates environmental and quality of life concerns regarding the operation of private scrap metal and auto salvage businesses in Philadelphia.

- The Cabinet can assist with connecting state and municipal enforcement prosecution agencies to ensure compliance and/or prosecution of businesses that are not complying.
- **Will it work?**
  - The Scrap Yard Task Force currently conducts monthly operations and with the further support of the City can ensure that enforcement results in prosecution when appropriate.
- **Is it worth it?**
  - Scrap metal and auto salvage businesses are important parts of Philadelphia’s recycling and future Zero Waste strategies.
  - Ensuring that these companies are in compliance with all laws and regulations will ensure that they can continue to recycle while preventing the creation of a public nuisance or environmental degradation.

### Long-term Enforcement Recommendation 7:

#### Include an Abatement Fine When CLIP Abates Vacant Lots

- **Can you do it?**
  - Fines can be established by City Council ordinance.
  - L&I currently charges a re-inspection fee to property owners who do not comply with a violation notice:
    - 2nd Re-inspection Fee: \$100
    - 3rd Re-inspection Fee: \$200
    - 4th and Subsequent Re-inspection Fees: \$350
- **Will it work?**
  - CLIP does not use the re-inspection fee process. Once a property is abated after the 2nd re-inspection, the property owner is billed for staff time, equipment, and supply usage, and the case is closed automatically in HANSEN, an L&I work management system.
  - By instituting abatement fines on top of CLIP administration fees, CLIP will have the power to gradually increase fines for non-compliant landowners where CLIP continues to abate.
- **Is it worth it?**
  - If CLIP must abate a property more than once in a year, the owner should receive a progressively more expensive fine in addition to the bill for City services. Otherwise property owners lack a strong incentive to take responsibility for maintaining their properties.
  - CLIP abated more than 15,000 vacant lots last year for non-compliance. Of these lots, 25 percent were repeat offenders.<sup>33</sup> Fining these repeat offenders will create revenue and encourage property owners to take more responsibility for their properties.

<sup>30</sup> Department of Sanitation, New York, “DSNY and BIC released study showing potential benefits of waste collection zones.” 2016.[http://www1.nyc.gov/assets/dsny/downloads/pdf/studies-and-reports/Private\\_Carting\\_Press\\_Release\\_2016\\_16\\_8.pdf](http://www1.nyc.gov/assets/dsny/downloads/pdf/studies-and-reports/Private_Carting_Press_Release_2016_16_8.pdf).

<sup>31</sup> Streets Department, City of Philadelphia. Annual Report. 2016. Unpublished raw data.

<sup>32</sup> Streets Department, City of Philadelphia. Annual Report. 2016. Unpublished raw data.

<sup>33</sup> CLIP, City of Philadelphia. Internal Data. 2016. Unpublished raw data.

## Cleaner Public Spaces Priorities

### Cleaner Public Spaces: Short-term Priorities

#### Short-term Cleaner Public Spaces Recommendation 1: Increase Education and Enforcement of Mattress Disposal Regulations

- **Can we do it?**
  - Current Streets Department regulations state that, “Mattresses and box springs shall be fully encased within a sealed, plastic bag.” These regulations are intended to protect sanitation workers from exposure to bed bugs.
  - When a mattress does not fit these conditions curbside, the mattress may not be picked up and a SWEEP officer can issue a violation and/or distribute educational materials on how to properly dispose of mattresses.
  - If a mattress is improperly dumped on a vacant lot or in the street, Sanitation and CLIP workers could be equipped with Tyvek suits as well as receive better information on preventing bed bugs so these workers can safely dispose mattresses.
- **Will it work?**
  - By utilizing SWEEP officers to enforce this regulation more strongly, the City can better educate the public on the need to wrap a mattress and ensure proper disposal.
  - Providing Streets and CLIP workers with the proper education and resources on how to avoid bed bugs will help them better perform their jobs and will reduce their risk exposure when cleaning up illegally dumped mattresses.
- **Is it worth it?**
  - In 2016, there were 1,271 reported cases of dumped and/or improperly set out mattresses.<sup>34</sup> By providing better resources, education, and enforcement, the City can reduce the prevalence of this commonly littered item that strains City services and creates unsanitary conditions in neighborhoods.

#### Short-term Cleaner Public Spaces Recommendation 2: Determine the Most Strategic Placement of Public Trash Waste Receptacles and Map Their Locations

- **Can we do it?**
  - Streets currently uses GIS to plot the locations of all Big Belly receptacles.
  - Planning and Development can assist with compiling and mapping the locations of neighborhood managed waste receptacles (RCOs, NACs).
  - Streets, Commerce, and Community Development Corporations (CDCs) can work to map commercial building receptacles.
  - Streets currently has an adopt-a-bin program for Block Captains that can be digitized with GIS surveys.
- **Will it work?**
  - The Behavioral Science Subcommittee is currently working to collect scientific evidence on the most strategic placement of public waste receptacles.
  - Depending on study results, we can better understand the impact of placing waste receptacles near areas of consumption and how to prevent short dumping.
- **Is it worth it?**
  - The City currently spends millions of dollars each year picking up litter.
  - According to a study conducted by Disneyworld, people will walk an average of 30 steps with trash before dropping it on the ground.<sup>35</sup>
  - By determining the most strategic placement and partnering with communities and businesses, we can ensure that the City budget expenditures for maintenance of waste receptacles is less than the cost for picking up litter.
  - Promoting the practice of mapping cans will allow us to compare their locations with litter index data to understand the impact of these public waste receptacles, develop a better understanding of where public waste receptacles exist, and ensure efficient servicing of these waste receptacles.

#### Short-term Cleaner Public Spaces Recommendation 3: Study Increased Access to Lidded Residential Recycling Bins

- **Can we do it?**
  - When single stream recycling first began, Streets provided lids for the square recycling bins, and these lids are still available from the manufacturer and can be purchased by Streets for public distribution if resources are available.

<sup>34</sup> Streets Department, City of Philadelphia. Annual Report. 2016. Unpublished raw data.

<sup>35</sup> “Top Five Weirdest Disney Facts,” World Of Walt, December 08, 2016, accessed June 19, 2017, <https://www.worldofwalt.com/weirdest-disney-facts.html>.

- Streets Department regulations state that, “All bags, bundles, containers, and receptacles shall be secured and covered if necessary so as to prevent their contents from being scattered or being carried away by wind or precipitation.”
- **Will it work?**
  - Lids on bins prevent litter from blowing out of the bins and prevent passersby from contaminating residential recycling bins with trash.
  - The Cabinet is currently conducting a behavioral study on the cost/benefit and impact on recycling rates caused by investing in bins that are more accessible to residents as well as the effects of litter reduction by lidded bins and the staff resources needed to manage lids.
- **Is it worth it?**
  - In 2016, the City of Philadelphia received and fulfilled requests for 40,000 recycling bins, so it is our preliminary hypothesis that easier access to bins will increase recycling rates.<sup>36</sup>
  - Bins cost an average of \$5 per unit, with a total annual cost of \$200,000. In FY 16, Philadelphia saved almost \$5,000,000 by recycling material rather than sending it to a landfill.<sup>37</sup>
  - Lids on bins will likely reduce the amount of litter that blows from the bins, thus reducing strains on City services to clean up litter, as well as reduce contamination of the recycling stream.

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#### Short-term Cleaner Public Spaces Recommendation 4: Increase Outdoor Recycling at Parks and Recreation Sites

- **Can we do it?**
  - Executive Order 5-96 mandates recycling in municipal facilities.
  - Philadelphia Parks and Recreation (PPR) is currently conducting a pilot outdoor recycling program in recreation centers in the northwest section of the city with a plan to provide outdoor recycling for all recreation centers by 2019.
  - PPR concessions is working on updating their RFPs to mandate recycling for vendors using PPR facilities.
- **Will it work?**
  - Providing easy opportunities for facility users to recycle will inherently increase diversion rates and reduce the amount of recyclable materials entering the waste stream.
  - Preliminary data shows that providing recycling cans stops Parks and Recreation users from littering plastic bottles.

- Recycling bin contamination rates for the PPR pilot have been very low.
- Parks and Recreation is currently considering reorganizing their waste pick up systems to take recycling and waste collections in house.
- **Is it worth it?**
  - Recreation centers are major areas for community development, and providing these bins further educates the community and diverts recyclables from the waste stream.
  - Recycling is more cost effective than disposing of material in a landfill.
  - Recycling fits with the mission and brings PPR in line with other park systems around the country.

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#### Short-term Cleaner Public Spaces Recommendation 5: Increase Removal of Illegal Clothing Donation Bins

- **Can we do it?**
  - L&I is currently working with Streets to inspect and remove illegal clothing bins.
  - Many of these bins are illegally placed and can be legally removed.
- **Will it work?**
  - In 2016, L&I identified for removal by the Streets Department 187 illegal clothing bins.<sup>38</sup>
  - Community education is needed to increase 311 reporting of illegal clothing bins.
- **Is it worth it?**
  - Many of these bins are unsightly, poorly maintained, and invite short dumping.
  - Removing these magnets for illegal short dumping will improve the quality of life in a neighborhood.

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#### Short-term Cleaner Public Spaces Recommendation 6: Expand Access to Sanitation Convenience Centers

- **Can we do it?**
  - Streets doubled the number of convenience centers from three to six in 2013. These centers accept household solid waste, e-waste, tires, polystyrene, universal waste, household hazardous waste, bulk items, etc.
  - The Cabinet can work with CDCs, RCOs, community groups, elected officials, and block captains to help organize more community pick up days for citizens to conveniently drop off their bulk materials.

<sup>36</sup>Streets Department, City of Philadelphia. Annual Report. 2016. Unpublished raw data.

<sup>37</sup>Streets Department, City of Philadelphia. Annual Report. 2016. Unpublished raw data.

<sup>38</sup>Streets Department, City of Philadelphia. Annual Report. 2016. Unpublished raw data.

- Although commercial trucks are prohibited from using sanitation centers, Streets has revised regulations to let resident or community trucks to use these facilities.
- Certain municipal facilities, such as neighborhood recreation centers, may also be able to serve as e-waste and universal waste drop off points in order to make these services more convenient.
- Streets has developed and implemented a pilot for designating consistent monthly nights in neighborhoods where a trash truck can be stationed on a prominent corner of the neighborhood for residents to utilize in addition to their normal collection day.
- **Will it work?**
  - The Sanitation Convenience Centers are ideally located in their current positions and by expanding access through partnerships and policy changes, residents can have more opportunities to properly dispose of trash.
  - Community pick ups would require an exemption for larger trucks to enter the facilities. Streets could create a sticker or placard for community vehicles involved in the program.
  - Streets data shows that 26th and Glenwood, the center in the most densely populated neighborhood, is the least-used.<sup>39</sup> This suggests that access issues are more related to access to a vehicle to move large goods than to proximity to a convenience center.
- **Is it worth it?**
  - Improved access to these centers would give more access to non-single stream recyclable goods, thus increasing our recycling diversion rates.
  - More access to proper disposal services could help reduce illegal short dumping.

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### Short-term Cleaner Public Spaces Recommendation 7: Construct Trash Corrals for Recreation Centers

- **Can we do it?**
  - Many recreation centers do not have outdoor or indoor trash storage, and trash is often placed near the curb before collection days, which invites residential short dumping.
  - There is often adequate space at these centers for a fenced-in “corral” to store trash securely.

- **Will it work?**
  - Not putting trash curbside for long periods of time will reduce the opportunities for residential and commercial short dumping.
  - A fenced-in area that obscures the trash will lead to more controlled and aesthetically pleasing landscapes.
- **Is it worth it?**
  - Residential short dumping is a major problem affecting Philadelphia Parks and Recreation. In one study, it was found that 60 percent of a Grounds Maintenance and Facility Caretaker’s day is spent picking up trash.<sup>40</sup> A more controlled storage system would increase the amount of time available for other maintenance tasks.

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### Short-term Cleaner Public Spaces Recommendation 8: Increase Proactive Solutions for Illegal Sign Abatement

- **Can we do it?**
  - The Cabinet currently has a working group focused on abating illegal signs with representation from the City, music promotion, the Board of Elections, and advocacy groups.
  - Philadelphia Code 10-1200 makes it illegal to post private signs on public property.
  - The City previously led a successful campaign to take down illegal signs and fine people and entities for putting up illegal signs.
  - The music community and Board of Elections are supportive of using proactive solutions to ensure that their constituents can promote while at the same time following the law and leading to a safer city.
- **Will it work?**
  - By developing proactive solutions with stronger education and enforcement, community members and City agencies can more effectively remove these illegal signs.
- **Is it worth it?**
  - These unsightly signs are typically made of paper or other flimsy material and become litter on streets once they detach.

<sup>39</sup> Ibid.

<sup>40</sup> Department of Parks and Recreation, City of Philadelphia. 2016. Unpublished raw data.

## Cleaner Public Spaces: Long-term Priorities

### Long-term Cleaner Public Spaces Recommendation 1:

#### Consider Restoration of Street Sweeping

- **Can we do it?**
  - Streets currently performs mechanical street sweeping in Center City and some commercial corridors.
  - Many private entities either conduct street sweeping or are building capacity for street sweeping.
- **Will it work?**
  - Regularly scheduled street cleaning is practiced in many cities, but presents significant operational, financial, and political challenges and considerations to fully implement city-wide. These challenges must be studied, quantified, and fully understood before making any commitments to restore service.
  - If financially and operationally feasible, street sweeping could begin as a pilot program in limited areas, which could be determined by community support and information from the litter index.
- **Is it worth it?**
  - The Streets Department estimates \$6 million is needed for an effective city-wide street sweeping program.<sup>41</sup>
  - Street sweeping can reduce street dirt and grime and the amount of debris entering gutters and waterways.

### Long-term Cleaner Public Spaces Recommendation 2:

#### Increase Support of Temporary and Long-term Community Solutions to Activate and Secure Vacant Lots

- **Can we do it?**
  - Many programs such as urban gardening, mural arts, and Pennsylvania Horticultural Society (PHS) programs are equipped to help residents activate and secure vacant lots.
  - CDCs and RCOs can also help educate and support neighbors to activate and secure vacant lots.
  - Public Property would need to create a waiver system, in accordance with the Law Department, to limit liability issues.
  - The City can work with community and private landholders to activate and secure vacant lots.
- **Will it work?**
  - On-site activity and stewardship has been proven to prevent short dumping and litter accumulation on these lots.

- The City must be transparent with community members to ensure that members understand that this may be a short-term solution, which can be modeled after the existing PRA leases for urban gardening.
- In an effort to encourage neighbors to invest in short-term use, the City could provide resources to assist community in activating and securing these lots.
- **Is it worth it?**
  - Philadelphia currently has 21,962 private vacant lots and 5,015 publicly-owned vacant lots.<sup>42</sup>
  - CLIP responded to 15,000 requests for cleaning vacant lots and Streets abated 921 short dumps on vacant lots. Using the Keep Pennsylvania Beautiful metric of \$619 per ton for a dumping clean up, this led to over \$8 million in cleanup costs for the City.<sup>43</sup>

<sup>41</sup> Ibid.

<sup>42</sup> Department of Planning and Development, City of Philadelphia. Internal data. 2017. Raw unpublished data.

<sup>43</sup> MSW Consultants. Statewide Illegal Dumping Cost Research. Report. Keep Pennsylvania Beautiful. August 2014. [http://www.keppabeautiful.org/wp-content/uploads/2016/09/KPB-Statewide-Illegal-Dumping-Cost-Research\\_Final\\_8-20-2014.pdf](http://www.keppabeautiful.org/wp-content/uploads/2016/09/KPB-Statewide-Illegal-Dumping-Cost-Research_Final_8-20-2014.pdf).

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