
APPENDIX C

2019-2020 SOLID WASTE AND RECYCLING COMMITTEE MEETINGS

1. September 26, 2019
2. November 21, 2019
3. January 23, 2020
4. May 21, 2020
5. July 23, 2020



City of Philadelphia Solid Waste & Recycling Advisory Committee (SWRAC)
Meeting Agenda: Thursday, September 26, 2019, at 3 p.m.

Location:

Philadelphia Municipal Services Building, 1401 John F. Kennedy Blvd., Philadelphia, PA 19102
16th Floor, Room Z

- Call to order & Introductions (F. Gookin / K. Offner)
- Approval of Minutes from July 25, 2019 SWRAC General Meeting
- Update Reports
 - Organics Subcommittee Report (P. Kohl / A. Hendricks)
 - PRO update (K. Lewis / N. Garry)
 - Education Campaign
 - Commercial, civic, religious, and overall Community Outreach
 - Commercial Waste Report
 - ZWL update (N. Esposito)
 - SWRAC Membership (K. Lewis)
- Municipal Solid Waste Plan (P. Bresee)
- Informational Items, Open Discussion, and Announcements
- Next Meeting Date
- Adjourn

2019 SWRAC Meeting Schedule

All meetings will be in Room X and start at 3pm unless otherwise noted.

General Meetings:

10/28 OR 11/1/19

11/21/19

City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

MEETING MINUTES September 26, 2019

ATTENDEES

SWRAC Members:

Fern Gookin (Co-Chair), Revolution Recovery
Bob Anderson, Curb My Clutter
Scott McGrath, City of Philadelphia-Streets
Chuck Raudenbush, Waste Management
Maurice Sampson II, Clean Water Action
Paul Kohl, Philadelphia Water Dept.

Others Present:

Kelly Offner (Co-Chair), Keep Philadelphia Beautiful
Mike Ewell, Interested Party
Amy Cornelius, Interested Party
Jim Mack, eForce Compliance
Peter Karasik, Interested Party
Neil Garry, City of Philadelphia-Streets
Adam Hendricks, Philadelphia Water Dept.
Maria Horowitz, Philadelphia Water Dept.
Daniel Lawson, Philadelphia Parks and Rec
Laura Cassidy, Dept. of Prisons
Phil Bresee, MSW Consultants
Nic Esposito, Zero Waste and Litter Cabinet
Sal Iadonisi, US Recycling
Phil Bresee, MSW Consultants
Andy Shea RNG Energy Solutions
Shardul Mullur, eForce Compliance

-Called to order by F. Gookin at 3:09pm.

-Approval of Minutes from July 2019

-Organics Subcommittee - Paul Kohl

- MABEX recap- legislative update for internal conflict among US AG and EPA. Energy from compost needs to be readdressed in EPA lawsuit
- Proposed ACT 101 update hopes to include organics, but it's not complete yet
- PA Pig virus updates & carcass digestion/landfilling
- PWD Wet Center contract with academic consortium at Temple University
 - Asked to do anaerobic studies for food waste

- Laura Cassidy, Dept. of Prisons
 - Working with vermiculture composting and in brought on larger facilities into

composting network at Philadelphia facility.

-Philadelphia Recycle Office Update - Kyle Lewis

- Contamination outreach and campaign has reached over 10,000 people so far
- Still need to bring recycling to Police and Fire facilities
- Received second batch of multi-lingual palm cards and door hangers
- OIT Recycling video posted on Streets website
- Digital toolkit now available on Streets webpage

-Commercial Waste Report - Neil Garry

- Over 900 reports submitted
- Commerce Dept. and Health Dept. as conduits for outreach

-Zero Waste and Litter - Nic Esposito

- Community composting network
 - 17 applicants that fit the bill
 - Working with PowerCorps for building systems
 - Sites located in rec centers, schools, neighborhood areas
 - Training site manager: have consultant to create manual and train
- Urban Composting RFP: applications open, 2 acre site, seeking vendor

<https://www.phlcontracts.phila.gov/bsso/external/bidDetail.sdo?bidId=B2006820&parentUrl=activeBids>

- Please share with groups like SWRAC, ANJER, SWANA, and PROP.
- C40 update - Thriving Cities Pilot recap
- 2019 progress report ready in a couple of weeks
- L&I: Commercial waste hauler permits to be rolled out
- Tire dealers must carry activity license
- 35 open cases for illegal dumping

-SWRAC Membership Update - Kyle Lewis

- Please send Kyle a brief bio if you are a SWRAC member.

-MSW Consultants - Phil Bresee

- Brought on to assist with update ACT 101 Plan
- ACT 101 grant opportunities are around \$35M-\$40M
- Philadelphia Plan:
 - Requirements review: main theme is ensuring disposal capacity
 - Plan developed 2013-2016
 - Submitted March 2017, June 2017 DEP and City agreed to incorporate 2019 contract awards
 - Staff edits and updates through mid 2018
 - 2019-2028 Planning horizon, to incorporate:
 - Greenworks 2.0
 - ZWL goals
 - Disposal agreements
 - MRF contract
 - To review again at next SWRAC

-Other updates/notes

- Kyle Lewis:

- Reach out to Kyle if you are interested in joining crew outs or crew leader meetings at training
- Contamination rates have shifted from 24% to 14-19% and now at 23%
 - Rain may have something to do with this
 - Commodities: excess of \$100/ton
- LevLane campaign is in second quarter of two years—> sustained campaign
- Bag ban not the silver bullet for plastic bag contamination at the MRF, but helpful.

-Kelly Offner:

- Pennsylvania Resource Council 80th Birthday celebration on 10/17 and all are invited- please contact Winnie Branton for more information.-Kyle:

-PES:

- Community conversations around post-refinery future, resource recovery and energy—> philadelphia.gov/refinery
- “Green Redevelopment” opportunities —> subdivision proceedings for the leases

-Daniel Lawson:

- Please pickup Parks mulch and leaves and spread word of availability

-Called to close by F. Gookin

Next Meeting 11/21/19

City of Philadelphia Municipal Waste Management Plan (Act 101): 2019 Update



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PRESENTED TO:

SOLID WASTE & RECYCLING ADVISORY COMMITTEE
(SWRAC)

SEPTEMBER 26, 2019

BY MSW CONSULTANTS



Philadelphia 2019 Act 101 Plan Update

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Today's Agenda:

- Introductions
- Act 101 Background
- Plan Requirements
- Current Plan
- Current Status
- Project Schedule
- Open Discussion

Act 101 Background & Requirements

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Pennsylvania Act 101

- Municipal Waste Management, Recycling and Waste Reduction Act of 1988
- Related legislation:
 - Act 190 (1996) – Waste Tires
 - Act 175 (2002) – Requires programs to move towards financial sustainability
 - Act 190 (2006) – Requires jurisdictions receiving grant monies to have programs in place.

Act 101 Recycling Requirements

- 10-year planning horizons
- Mandated jurisdictions must meet 35% recycling rate
 - Applies to jurisdictions with >5,000 population and >300 square miles
 - Must provide 1x month collection; target at least three recyclable materials; leaf waste
 - Must enact local ordinance
 - MF/C/I establishments required to recycle

Act 101 Related Grants

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- Grants available to county and municipal governments:
 - Act 101, Section 901 County Planning & HHW Education Grants
 - 902 Recycling Program Development & Implementation
 - 903 County Recycling Coordinator Grants
 - 904 Recycling Performance Grants
- Grants program supported by \$2 per ton disposal surcharge
- >\$35-40 million in monies awarded per year

Plan Organization:

- Plan development and organizational requirements very prescriptive
- Executive summary and 13 chapters
- Chapters 1-5 are heart of the plan
- Includes appendices

1. Description of the waste. This means tons and contents of municipal waste that will be generated in the county, including waste from special events
2. Description of facilities. An analysis of the facilities currently used by the county.
3. Estimated future capacity. An analysis of the potential county need for capacity.
4. Description of Recycling Program. Development of means to meet the 35% goal by 2003.
5. Selection and Justification of Municipal Waste Management Program. An analysis of the county's program, including facility selection and cost of disposal.
6. Location. The identification and locations of available facilities.
7. Implementing Entity Identification. Who will be responsible for implementing the plan on behalf of the county?
8. Public Function. Justification of and mechanisms to implement public ownership or public function in municipal waste processing or disposal, if proposed.
9. Copies of Ordinances and Resolutions.
10. Orderly Extension. An analysis of how the county's waste management system is coordinated with other county plans, ordinances and programs.
11. Methods of Disposal Other Than by Contracts.
12. Non-Interference. A discussion of how the county's plan will not interfere with existing facilities.
13. Public Participation. Advertisements, hearing minutes, SWAC meetings, notices, other public information documents.

Philadelphia's Current Act 101 Plan

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- Developed 2013 through 2016
 - Executive Order 15-08
 - Philly Greenworks
 - Council bills & resolution
 - Zero Waste & Litter Plan
 - SWRAC input
- Submitted to DEP for review
March 2017
- June 2017 DEP and City
agreed to revise plan to
incorporate 2019 disposal
contract awards
- Staff edits & updates through
mid-2018



Philadelphia Act 101 Plan: 2019 Update

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- 2019-2028 planning horizon
- Greenworks 2.0
- Zero Waste goal
- New disposal agreements
- New MRF contract:
 - Updates on recovered materials end-markets
 - Recyclables composition
 - New education & outreach
- Other programs

MSW Work Plan & Scope

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1. Technical

Update waste and recycling projections through 2020



2. Append Disposal contracts

Confirm contracts verify capacity over planning period.



3. Public Participation

SWRAC participation (2-3 meetings)



4. Streamline Plan Document

References to certain documents will be included in place of attaching documents that add considerable length to the MWMP. DEP does not require these documents be in the Plan.

Act 101 Plan Update Timeframe

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Planning Activity	Timeframe
Meeting with PA DEP	August 2019
Plan edits (data & narrative)	August-September
SWRAC meeting #1	September 2019
Chapter updates (1-5)	October 2019
SWRAC meeting #2	November 2019
Plan finalization	December 2019
Plan submission to DEP	Early 2020

Thank You and Questions?

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- **Phil Bresee, Sr. Consultant**
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- **Steve Deasy, Sr. Associate**
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City of Philadelphia Solid Waste & Recycling Advisory Committee (SWRAC)
Meeting Agenda: Thursday, November 21, 2019, at 3 p.m.

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Philadelphia Municipal Services Building, 1401 John F. Kennedy Blvd., Philadelphia, PA 19102
16th Floor, Room Z

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General Meetings:

1/16/20



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

MEETING MINUTES

November 21, 2019

Philadelphia Municipal Services Building, 1401 John F. Kennedy Blvd., Philadelphia, PA 19102

16th Floor, Room X

ATTENDEES

SWRAC Members:

Fern Gookin (Co-Chair), Revolution Recovery
Jack Embick, Interested Party
Maurice Sampson II, Clean Water Action
Bob Anderson, Retriever
Paul Kohl, Philadelphia Water Dept.
Sal Iadonisi, US Recycling

Others Present:

Peter Karasik, Interested Party
Phil Bresee, MSW Consultants
Maria Horowitz, Philadelphia Water Dept.
Adam Hendricks, Philadelphia Water Dept.
Neil Garry, City of Philadelphia-Streets
Amy Cornelius, Interested Party
Laura Cassidy, Dept. of Prisons
Tamika Davis, PHL Airport
Daniel Lawson, Philadelphia Parks and Rec
Andy Shea RNG Energy Solutions
Bill Lehman, Waste Management
Natalie Walker, University of Pennsylvania
Kyle Lewis, City of Philadelphia-Streets
Nic Esposito, Zero Waste and Litter Cabinet

Called to order by F. Gookin at 3:10pm.
Approval of Minutes from September 2019.

Organics Subcommittee – Paul Kohl

- No updates; there was no meeting.

Philadelphia Recycle Office Update – Neil Garry

- Education Campaign – Contaminations Rates
 - Contamination rates vary throughout the city, district by district and seasonally
 - The city contamination rates are tracking with the national rate of about 24%
 - We need to improve
 - P. Kohl asked if it is known how much organics make up the contaminants; N. Garry responded that they will have more data on that in 2020
 - M. Sampson asked if PRO is still tracking diversion rates; N. Garry responded yes: they are tracking diversion and contamination rates and report them quarterly; he will see if this information can get added to the open data portal

- Commercial, civic, religious, and overall Community Outreach
 - Outreach campaigns are ongoing; have gotten a good response so far by meeting people where they are
 - Will do a staggered approach by neighborhood and will share a calendar of neighborhoods, event dates and locations by the end of the year
 - 2020 outreach will increase focus on the plastic bag (the #1 contaminant); for retailers who sell 'recycling bags' will be asking them to either add signs to clarify that they cannot go into the recycling stream or remove the bags from their shelves
 - Recycling Game and instructions is on the recycling website
 - M. Sampson asked if PRO is working with the Trash Academy; N. Garry responded yes.
 - Requesting leads for:
 - Venues and events for outreach campaign and messaging
 - Merchants who are selling 'recycling bags' so they can receive targeted messaging
 - Christmas tree disposal sites
- Commercial Waste Report
 - Just started; have received about 1,000; hope to get 13,000 returned by the end of 2020
 - Mapped responders and they are equally spread out throughout the city
- Participation Rates
 - J. Embick asked if incineration is still happening; N. Garry responded no: that stopped around April, only a portion of the pick-ups were being incinerated for about 4-6 months; while a new contract was being negotiated, about ½ of the recycling pick-ups (the most contaminated) were sent to an incinerator as a temporary measure
 - Discussion continued about how this may have affected participation rates, and if the city is tracking participation rates to even know if there was an effect
 - N. Esposito commented that we are not tracking participation rates, we are only tracking tonnage
 - M. Sampson commented that the city used to measure participation rates by counting set-outs.
- SWRAC Website
 - J. Embick commented that there are many pages out of date on the SWRAC website including missing minutes, agendas, and meeting date; N. Garry responded that the website is currently out of their control but they hope to regain control soon; they will update information at that time.

Zero Waste and Litter - Nic Esposito

- Progress Report
 - Report is nearly ready; press release will be coming soon
 - Does not count waste to energy as diversion, it counts as disposal
 - Based on the 2017 Action Plan, trying to count other things that were previously missing from calculations, like Parks organics, reuse items, and more.
 - Will include information on zero waste partnerships, zero waste events, community composting, municipal building audit
- Community Composting
 - PowerCorps is building the bins now
 - RFP is due on December 6th; expect to choose a vendor soon after
 - Working on a path to permit with the State
- Working on 2020 Litter Index
- Anti-Litter Enforcement
 - Seeing improvement: 11,500 tons collected in FY16; 6,500 tons collected in FY19
 - Environmental crimes unit is doing a great job; 11 cases in FY18; 35 cases in FY19; crimes are tried in court of common pleas
 - J. Embick commented that it could be interesting to invite people to an upcoming SWRAC meeting to talk about the prosecutions; N. Esposito responded that he can see if he can bring in a speaker.
- Waste hauler permits started being required on construction permit applications starting in October 2019; hauler and contractor are required to keep documentation on file for 3 years.

MSW Consultants - Phil Bresee

- MSW Consultants tasked with updating Municipal Solid Waste Plan to comply with Act 101; Act 101 requires plans to be updated on a 10yr cycle, which commonly ends up being a 12yr cycle
- In 2017, an updated plan was submitted to DEP; DEP advised to resubmit when a new disposal contract went into place in 2019; now that the contract is in place, the plan is being edited for resubmission.
- The plan is very prescriptive; MSW Consultants is working with the city to update chapters; also working with commercial haulers to get data
- Original goal was to get a draft done and sent to the DEP in January; February is more likely
- Want to incorporate information from various city departments: ZWL, Parks, Water, Prisons, Airport
- Will get SWRAC a draft of the plan for review and comment
- This version is considered a 'non-substantive update' which does not require a public hearing
- A 'substantive update' would be triggered if the city removed something from the plan (like elimination of curbside pick-ups) but not for adding to the plan (like plastic bag ban or organic curbside pick-ups)
- The 10yr cycle for this plan will be for 2019-2028

Keep Philadelphia Beautiful Update

- No one present to give update.

Informational Items, Open Discussion, and Announcements

- Discussion about the current state of the recycling markets
 - Markets are generally low and not good at the moment
 - New investments are underway for paper, but it could be several years before capacity comes online; new mills are being designed to handle more contamination
 - Value of recycling is about \$35-45 per ton today, which is about \$100 per ton lower than what it was a few years ago
 - The city is currently paying about \$106 per ton now, for clean material, higher for more contaminated loads; these rates include the processing fee;
 - \$100 per ton is about the entry point for recycling contracts right now; some contracts are as high as \$150 or \$200 per ton.
- Question to the group about any comments on the recent Inquirer article about Streets Dept accidents and also about workers comp issues; no one had additional comments or information to provide.
- Update requested on RNG Energy Solutions by Andy Shea
 - Proposing an anaerobic food waste processing facility on the PES refinery property that is expected to process 1100 tons per day, 5-6 days per week; plus 300 tons per day of fats, oils and grease
 - PES refinery site is going through bankruptcy hearings tomorrow
 - Point Breeze Renewables filed a lease with the city in 2017
 - Starting to introduce permits to the city; there will be changes to the stormwater plan: the water will be processed until purified then returned to the Schuylkill River
 - Will be sending in individual permits for resource recovery, taking food waste and turning it into biogas and water
 - Will keep SWRAC apprised about public hearing
 - Expect permitting process to take another 12 months
 - Site would be listed as a facility in a future MSW Plan
- Update requested on zero-waste Marathon event this weekend by Daniel Lawson
 - Goal is to get over 90% diversion; have been just shy of 90% in the past
 - Retriever is working to collect the clothes; the Prisons will be washing the clothes
 - Philabundance will be taking all uneaten foods
 - Braskem and Hillcrest will be taking the heat blankets and coroplast for recycling

Called to close by F. Gookin at 4:30pm

Next Meeting 01/16/20



City of Philadelphia Solid Waste & Recycling Advisory Committee (SWRAC)
Meeting Agenda: Thursday, January 23, 2020 at 3 p.m.

Location:

Philadelphia Municipal Services Building, 1401 John F. Kennedy Blvd., Philadelphia, PA 19102
16th Floor, Room X

- Call to Order & Introductions (F. Gookin / K. Offner)
- Approval of Minutes from November 21, 2019 SWRAC General Meeting
- Update Reports
 - State of Recycling Markets (B. Anderson)
 - Organics Subcommittee Report (P. Kohl / A. Hendricks)
 - ZWL update (N. Esposito)
 - KPB Update (K. Offner)
 - PRO update (K. Lewis / N. Garry)
 - Education Campaign – Contamination Rates
 - Commercial Waste Report
- Municipal Solid Waste Plan (K. Lewis)
- Informational Items, Open Discussion, and Announcements
- Next Meeting Date
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2019 SWRAC Meeting Schedule

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General Meetings:

1/23/20

** 2/20/2020 – MSW Plan Review

3/19/20

5/21/20

7/16/20

9/17/20

11/19/20

City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

MEETING MINUTES

January 23, 2020

ATTENDEES

SWRAC Members:

Fern Gookin (Co-Chair), Revolution Recovery
Kelly Offner (Co-Chair), Keep Philadelphia Beautiful
Maurice Sampson II, Clean Water Action
Bob Anderson, Retriever
Paul Kohl, Philadelphia Water Dept.
Sal Iadonisi, US Recycling
Chuck Raudenbush, Waste Management
Vivian Van Story, Community Land Trust

Others Present:

Maria Horowitz, Philadelphia Water Dept.
Adam Hendricks, Philadelphia Water Dept.
Neil Garry, City of Philadelphia-Streets
Laura Cassidy, Dept. of Prisons
Tamika Davis, PHL Airport
Daniel Lawson, Philadelphia Parks and Rec
Andy Shea RNG Energy Solutions
Kyle Lewis, City of Philadelphia-Streets
Nic Esposito, Zero Waste and Litter Cabinet
Kimberly Mann, RecycleDelphia
Kurt Sweet, RecycleDelphia
Winnie Branton, Pennsylvania Resources Council
Scott McGrath, City of Philadelphia-Streets
Ashley Cadilac, Clean Water Action
Danisha Heyward, Clean Water Action

Called to order by K. Offner at 3:10pm.

Approval of Minutes from November 2019.

State of Recycling Markets – Bob Anderson

- Paper / fibers
 - India had been filling a gap, now they have moved their contamination rate to 1%, which is very difficult for processors to meet
 - Mixed paper has been challenged, and movement has been difficult, but there has been some favorable movement in the market, of ~\$5/ton in most of the Northeast region
 - Corrugated cardboard is ~ \$25-30/ton, which has seen some positive movement in the near term with an expectation of favorable near term pricing improvement.
 - Cardboard has historically been stable, but there was a big drop. There are some indicators that it is artificially low, particularly with the robust US economy.
- Plastics
 - Of the container grades HDPE ‘natural’ is the real shining star right now at ~\$1260/ton

- Pigmented HDPE is ~\$200/ton, down from ~ \$340/ton in the fall. It is typical to see a drop this time of year because the material is often used to make pipe, which should pick back up in the spring.
- It's rare to see such a big gap between 'natural' and 'pigmented' grades
- PET is ~\$200/ton, up from ~\$170/ton in the fall
- Metals
 - Aluminum is down to ~\$990/ton from ~ \$1200/ton in September
 - Steel is ~\$145/ton, up from ~\$90/ton in the fall
- Glass – not favorable
- Investments
 - Pratt has committed \$1billion to build 2 mixed paper plants in the US, probably in the Midwest
 - Nestle has committed to \$1.5billion for recovery of PET, with a goal to increase recycled content in their bottles from 2% to 15% by 2025. Nestle announced a desire to start paying a premium for recycled PET.
 - India, China, and Vietnam have recently started accepting a “slurry” of confetti-like paper
 - Some Chinese and American companies are starting to invest in paper processing the U.S.
 - There is a proposed paper plant at the old US Steel facility near Tulleytown
 - A PET plant has been proposed in the Berks County area
- There was discussion about contamination rates and the difficulty to meet specs; the consensus was that education is needed to address contamination.

Organics Subcommittee – Paul Kohl

- The Philadelphia Water Department (PWD) is participating in a research project with the Water Environmental Technology (WET) Center at Temple.
 - Researching anaerobic digestion of food waste
 - Study findings may be helpful when applying for permit modifications
 - Trying to get EBS (engineered bio-slurry) from Waste Management as pre-processed food source; WM is doing a small-scale study in Philadelphia and the research will be done with Philadelphia EBS if timing is right.
- RNG facility update (Andy Shea)
 - Site of proposed facility on PES site; PES bankruptcy is in process.
 - There is a primary and secondary bidder; RNG is in active discussions with them about the lease so the new owner will be up to speed.
 - RNG is continuing to go through the permitting process for the facility; will keep this group updated as things progress. Targeting to have permits complete by the 4th quarter of 2020.
 - Site is processing waste and making a product; working to push for “certified organic” products for liquid fertilizer and bio-solids.
- Nic Esposito from the Zero Waste and Litter Cabinet updated the subcommittee about the community composting and urban composting permit at the meeting, which he will discuss in more detail later in this meeting.
- Neil Garry from the Streets Department updated the subcommittee on the waste audits; they will be looking at how much organics are in the ‘recycling’.
- Laura Cassidy from the Department of Prisons updated the subcommittee on composting at the Prisons. They are working to get the final facility to come online so all facilities have composting. They hope to have them including in the composting program by the end of the summer. On average, 1.4 pounds of raw food-waste is produced per inmate per day.

- Mike Giuranna from the US EPA updated the subcommittee on funding opportunities: \$53,000 for community composting and \$43,000 for public outreach and education related to organics recycling.

Zero Waste and Litter - Nic Esposito

- Progress Report is complete and on the website: cleanphl.org
- 2020 Litter Index will begin in a few weeks and will conclude in July; different Departments will be engaged to complete surveys of litter across the city.
- Plastic bag ban was passed; plastic bags are the 5th most littered item in Philadelphia; Cabinet will be doing outreach to residents and business to educate about the ban.
- Anti-Litter Enforcement
 - 35 active cases
 - Just prosecuted a notorious tire dumper; received a \$1000 fine, community service, and his vehicle was impounded
 - Another case will start prosecution tomorrow
 - Considering listing the prosecutions on the website; will have meetings about that soon.
 - Will be adding more cameras to notorious dump locations; will not be identifying where those locations are so people don't seek them out.
 - There is a list of fines and restitution in the FY19 report; FY20 fines and restitution is expected to be higher.
- Waste to energy is not included in diversion in zero waste calculations.
- Will be doing more Municipal Building Audits and will be making the Municipal Building Audit Report for all departments public in the very near future.
- Community composting network
 - PowerCorps is building (3) bins for each of the 12 selected sites; bins are 4'x4' and will start to be installed next week.
 - Community composting manual is open source and will be available to anyone who wants to start composting and be part of the network, even if the site was not selected through the RFP process.
- Vendor has been selected for the urban composting site; getting permitting and insurance in place before making an announcement; hope to have operation moving by the end of April; will be first urban composting permit in the state.
- Zero Waste Partnership Program – Rittenhouse Hotel has joined and a new big partner will be announced in a few weeks
- 2020 will be focused on reduction
 - Food recovery will be a big piece of this
 - Engaged with Thriving Cities Initiative to answer, "How can a city thrive while reducing waste and consumption?" Next workshop is in March.
- Pitch & Pilot Program is an alternative way to solicit ideas, rather than an RFP process. Proposals closed on 1/16/20; the proposals are being read now.

Keep Philadelphia Beautiful Update – Kelly Offner

- Presented select findings of Litter Cost Study, which will be coming out in February
 - Study done by Burns & McDonnell
 - Surveyed 7 counties in Pennsylvania, including Philadelphia
 - On average, it costs \$614/ton to clean-up illegal dump sites versus \$60/ton to dispose of material properly
 - More detailed numbers specific to the economics in Philadelphia will be available in the report.
 - Slides will be made available to the group

Philadelphia Recycle Office Update – Kyle Lewis / Neil Garry

- Education Campaign – Contaminations Rates (Kyle Lewis)
 - Contamination rates are still in the 24-25% range
 - The education campaigns will focus on one item at a time and target messaging around that. The focus this year is the plastic bag.
 - There will be a postcard campaign that goes out soon.
 - There was general discussion about how contamination rates are measured; they are based on the loads that actually go through the processing system. It was commented that the methodologies of WM and MSW Consultants should be compared to see if they are measuring contamination in the same way.
 - Waste Management had a fire at their MRF in early January. It is thought to have started from a lithium ion battery that was exposed to water, which would have created a fire. Lithium ion batteries can be recycled but should not be put in the municipal recycling stream.
 - A resident put an oxygen tank in a recycling bin for pick-up, and it exploded when compacted in the truck. It caused injury to the worker and damage to the equipment. The tank is metal but should not be put in the municipal recycling stream.
 - Tanks might be the focus of the education campaign next year.
 - There are 13 sanitation districts in 6 sanitation areas. Education campaign will be done in phases.
 - Messaging can be confusing; not everything with a recycling symbol can go in the bin.
 - Found that one of the most effective way of communicating messaging is going to community meetings.
 - There was a question about recycling pick-ups being done at PHA sites; Streets does curbside collection at non-high-rise and non-multifamily PHA sites.
- Municipal Solid Waste Plan (Kyle Lewis)
 - Plan is in process; have been doing audits at Waste Management
 - There have been some delays; there will be a special SWRAC meeting to review the plan on 2/20/20.
- Commercial Waste Report (Neil Garry)
 - Have gotten 10% compliance on the waste report so far
 - Are looking at the data coming in to see if additional haulers and processors should be contacted
 - Trying to figure out what waste is being generated, who is generating and who is hauling.
 - Will develop a 2020 Action Plan. Will try to get businesses that generate C&D waste to participate; the new L+I regulations that require contractors to list a hauler should help

Informational Items, Open Discussion, and Announcements

- Kelly Offner – will send calendar invites for the SWRAC meetings for the rest of the year, including an additional meeting in February to review the MSW Plan
- Chuck Raudenbush – Waste Management is working with the Phillies again to host “Red Goes Green”; you can sign up to get on the list to help with recycling at one of the 81 home games plus any playoff or World Series Games; SWRAC participated in the past and will look into potential dates for the group to participate this year.
- Philly Spring Clean Up is scheduled for 4/4/20
- Street sweeping will start in the summer

Called to close by K. Offner at 4:30pm

Next Meeting 02/20/20, MSW Plan Review



City of Philadelphia Solid Waste & Recycling Advisory Committee (SWRAC)
Meeting Agenda: Thursday, May 21, 2020, at 3 p.m.

Location:
Via Zoom

-
- Call to order & Introductions (F. Gookin / K. Offner)
 - Approval of Minutes from January 31, 2020 SWRAC General Meeting
 - Financial Disclosure Filing – Appointed Members to file City form at <https://financial-disclosure.phila.gov/>
 - Covid-19 Updates (K. Lewis)
 - Zero Waste & Litter Cabinet
 - Recycling Collection Schedule
 - State of Recycling Markets (S. McGrath)
 - Update Reports
 - Organics Subcommittee Report (P. Kohl / A. Hendricks)
 - Pitch & Pilot (K. Lewis)
 - PRO update (K. Lewis / N. Garry)
 - Education Campaign & Community Outreach
 - Commercial Waste Report
 - Municipal Solid Waste Plan (P. Bresee)
 - Informational Items, Open Discussion, and Announcements
 - Next Meeting Date
 - Adjourn

2020 SWRAC Meeting Schedule

All meetings will be via Zoom or Microsoft Teams

General Meetings:

7/16/2020

9/17/2020

11/19/2020

City of Philadelphia Solid Waste and Recycling Advisory Committee (SWRAC)

MEETING MINUTES May 21, 2020

ATTENDEES

SWRAC Members:

Fern Gookin (Co-Chair), Revolution Recovery
Kelly Offner (Co-Chair), Keep Philadelphia Beautiful
Maurice Sampson II, Clean Water Action
Bob Anderson, Retriever
Paul Kohl, Philadelphia Water Dept.
Chuck Raudenbush, Waste Management
Jack Embick, Interested Party

Others Present:

Adam Hendricks, Philadelphia Water Dept.
Neil Garry, City of Philadelphia-Streets
Laura Cassidy, Dept. of Prisons
Tamika Davis, PHL Airport
Daniel Lawson, Philadelphia Parks and Rec
Andy Shea RNG Energy Solutions
Kyle Lewis, City of Philadelphia-Streets
Phil Bresee, MSW Consultants
Christine Knapp, Office of Sustainability
Peter Karasik, Interested Party
Mike Ewall, Interested Party
Mike Guiranna, US EPA
Amy Cornelius, Interested Party
Scott McGrath, City of Philadelphia-Streets
Christian Walter, Interested Party

Called to order by K. Offner at 3:05pm.

- Motion to begin: Kyle Lewis
- 2nd: Bob Anderson, Chuck Raudenbush, Maurice Sampson

Approval of Minutes from January 2020.

- Motion to approve: Bob Anderson
- 2nd: Kyle Lewis

Financial Disclosure Filing – Appointed Members to file City form at

<https://financial-disclosure.phila.gov/>

- Will be available to complete on June 1, 2020 and will be due by July 15, 2020
- Just the City form is required this year; State form is not needed.

COVID-19 Updates – Kyle Lewis

- Zero Waste & Litter Cabinet

- As a result of the pandemic, the City of Philadelphia’s tax base has been reduced, which in turn caused budgetary constraints, at a time of increased expenses (PPE). A difficult decision has been made to eliminate the Zero Waste and Litter cabinet, including the Director’s position. Nic Esposito’s last day is 6/1/20. Many of the programs and projects of the cabinet will transfer to Office of Sustainability; some responsibilities will fall to other departments as well. Hailey Jordan and Helena Rudoff’s roles will remain focused on waste within the Office of Sustainability.
- Christine Knapp – working to absorb ZWL work plans and find synergies between their work and the work the OOS is already doing. Happy to provide a home to some of those programs. Very much a work in progress at this time.
- Discussion from group about wanting to know what programs will stay and go.
 - C. Knapp: Broadly speaking (since the details are still being worked out): ‘Litter’ programs will likely move to other departments – short dumping enforcement and strategy, for example, already has a good structure in place with other departments; ‘Waste Reduction’ will be more likely to stay within OOS realm. Hailey and Helena will continue to be the point-people for waste.
 - M. Sampson: asked about the plans for the plastic bag legislation. Law will go into place July 2, 2020 and the enforcement will be delayed until January 1, 2021. There is a lot of misinformation circulating in the media about why it is being pushed back and it may be influencing other municipalities.
 - K. Offner – messaging and communication will be key and will be part of the discussions.
 - S. McGrath – SWRAC will be asked to play a bigger role in legislation moving forward.
 - P. Kohl asked about the status of the composting projects.
 - S. McGrath – Block Captain work will continue to be part of the Streets Department.
 - D. Lawson – composting project is close to the finish line and will then become a Parks and Recreation project. They are currently working with consultant on the application for the DEP; intent to award a vendor soon; working to get site ready; material will be collected from Parks and Rec programs and Parks and Rec will have control of the end product.
- Recycling Collection Schedule – Kyle Lewis
 - Moved to every other week schedule when COVID-19 crisis hit, due to time and attendance and trying to manage resources
 - Looking at different iterations of collection schedule. There will be more scheduling changes to come, pending an assessment and budgeting process.
 - M. Sampson asked about weekly trash trucks picking up recycling. K. Lewis asked for this to be reported so it can be corrected.
 - M. Sampson is curious about quality of and volume of recycling. S. McGrath says there have been increased volumes in trash and recycling. C. Raudenbush noted they have seen a slight and consistent increase in quality.
 - M. Sampson suggested using QR codes to get messaging out; this is working well as a tool for voter registrations. Demographics are showing that black and brown communities are utilizing the QR codes. D. Lawson mentioned TikTok as a potential communication tool as well.

State of Recycling Markets – Scott McGrath

- The markets are currently volatile. The City’s rate has gone down to about \$100/tn. This is largely because cardboard and paper have improved.

- Aluminum and PET plastics are really bad. Plastics are struggling because of how low fuel prices are. They are using natural gas to make plastics now, which is even cheaper than oil.
- There was a push to increase recycled content in plastic bottles – a lot of those initiatives are on hold right now. Hard to tell where it's all going to go.
- Hopefully cardboard and mixed paper will hold through the summer. Domestic markets are the primary consumers, in part due to demand for delivery of online products from Amazon and others.
- C. Raudenbush noted that the WM facility is adjusting to the new recycling schedule and how to process when material is received all at once, every other week, instead of more evenly received throughout the week.
- K. Lewis noted that most people are choosing to hold their recyclables instead of putting it out with the trash, which is a good sign.
- P. Kohl asked if it is known how long the current recycling schedule will last. K. Lewis said there is no end date right now. There are talks about changing to a new schedule on June 1st, but it hasn't yet been decided what that will be.

Organics Subcommittee – Paul Kohl

- Cancelled most recent subcommittee meeting
- Reviewed subcommittee notes from March meeting.
- Mid-Atlantic Bio Energy Council no longer exists. Bio Gas portion was absorbed by American Bio Gas Council, working to include more regional work.
- Water and Environmental Technology (WET) Center – PWD has been working with research hub at Temple University; project has been at a standstill due to COVID-19; everything is set up and ready to go at Temple but they are waiting for the graduate research labs to open again, which may happen in June.

Pitch & Pilot – Kyle Lewis

- Started by Office of Innovation and Technology
- First project will be waste removal; there will be an announcement about this on 5/28/20. That program will start it's collections right away.

Philadelphia Recycle Office Update – Kyle Lewis / Neil Garry

- Education Campaign & Community Outreach (Kyle Lewis)
 - Messaging around recycling contamination have been suspended until they get clarification on what the operational schedule will be.
- Commercial Waste Report (Neil Garry)
 - There have been about 40 entries since March 1, which is more than expected during the COVID-19 crisis.
 - There have been 1,380 reports submitted so far (some are from past years)
 - Not pursuing compliance aggressively because businesses are hurting right now; will wait until the economy comes back.

Municipal Solid Waste Plan – Phil Bresee

- Reviewed presentation with the group.
 - Questions from the group were posted in the chat. They were answered after the meeting and included in these minutes:
1. Q: Construction and demolition debris (C&D) makes up about 15 percent of the City's overall waste generation. How does that compare with the national average?

A: Because the US EPA and many states do not consider C&D as a municipal solid waste, it is difficult to determine a national average. However, MSW Consultants has reviewed MSW to C&D ratio data from a number of U.S. cities who have measured both quantities and can report a range from 11 percent to as high as 40 percent of total waste generation.

2. Q: Is the tonnage per capita reduction a reflection of the increase in plastic in the waste stream?

A: Per the US EPA, overall per-capita municipal solid waste generation has leveled off during the past 10 years due to changes to the solid waste stream, which include a decrease in paper generation (heavy) due to the influence of digital media, and an increase in plastics generation (lighter weight). We believe it is fair to say these same trends are occurring here in Philadelphia.

3. Q: Is there an expectation that the population will be leveling? Why would the level of waste stay the same over the next 10 years?

A: Solid waste generation is expected to remain relatively level due to a continuation of MSW composition trends (i.e. less paper, more plastics) and modest population growth during the planning horizon as forecast by the Delaware Valley Regional Planning Commission (approximately 4,900 new residents per year or a growth rate of .31 percent).

4. Q: Can this PPT be shared after the meeting?

A: The PowerPoint will be made available as part of the meeting minutes and shared with SWRAC members prior to the next meeting.

5. Q: What is being done with the glass collected for recycling? And how much of the material collected as recycling going to WM is recycled vs. landfilled vs. incinerated in trash incinerators vs. used for SpecFuel and burned (and where is it burned)?

A: All recovered glass is processed and shipped to PA-based manufacturer where it is then repurposed. There are instances where the glass might not meet the end-market's product specifications due to processing system limitations, which then might cause WM to dispose of the glass at a landfill. Glass is not a product that WM knowingly wants to dispose of or send to Spec Fuel or an incinerator.

Residue is delivered into the former Spec Fuel plant now known as Continuous Materials. Continuous recovers as much of the residual component as possible to repurpose into their proprietary finished product. What does not meet their spec. is discarded and shipped into waste-to-energy (Morrisville, PA) or landfill (Fairless Hills, PA) for disposal.

6. Q: How much of the trash that goes to WM's SpecFuel plant is recycled vs. landfilled vs. incinerated in trash incinerators vs. used for SpecFuel and burned? Where is it burned?

A: Between 200 and 400 tons of the City's residential trash is diverted for processing through WM's SpecFuel operation each day. Residues from this process are shipped into waste-to-energy or landfill (as above) for disposal.

Informational Items, Open Discussion, and Announcements

- The group was asked to share any items with Fern or Kelly to include with these minutes:

- D. Lawson: Philadelphia Parks and Recreation (PPR) is in the final stages of working with consultants from Humanim, Inc., Quantified Ventures, and Comprehensive Land Services to produce a market analysis and business plan for an improved processing of urban wood. The preliminary pieces of the study show that PPR does in fact capture a significant portion of wood waste in the Philadelphia area but that the material can be processed into much higher value products. Materials produced this way have already been piloted all over PPR assets and partner departments and organizations, but these consultants will help identify how to scale these types of projects up. The final report should be complete this Summer.

Called to close by K. Offner at 4:30pm

- Motion to adjourn Bob Anderson
- 2nd: Maurice Sampson

Next Meeting 07/16/20

Philadelphia 2019-2028 Municipal Waste Management Plan Update: Project Status



1

PRESENTED TO:

SOLID WASTE & RECYCLING ADVISORY COMMITTEE
(SWRAC)
MAY 21, 2020

BY MSW CONSULTANTS



Philadelphia 2019-2028 Act 101 Plan Update

2

Today's Agenda:

- Refresher on Act 101 & Plan Requirements Background
- Activities & Progress to-date
- Revised Schedule

Act 101 Background & Requirements

3

Pennsylvania Act 101

- Municipal Waste Management, Recycling and Waste Reduction Act of 1988
- Related legislation:
 - Act 190 (1996) – Waste Tires
 - Act 175 (2002) – Requires programs to move towards financial sustainability
 - Act 190 (2006) – Requires jurisdictions receiving grant monies to have programs in place.

Act 101 Recycling Requirements

- 10-year planning horizons
- Mandated jurisdictions must meet 35% recycling rate
 - Applies to jurisdictions with >5,000 population and >300 square miles
 - Must provide 1x month collection; target at least three recyclable materials; leaf waste
 - Must enact local ordinance
 - MF/C/I establishments required to recycle

Act 101 Related Grants

4



- Grants available to county and municipal governments:
 - Act 101, Section 901 County Planning & HHW Education Grants
 - 902 Recycling Program Development & Implementation
 - 903 County Recycling Coordinator Grants
 - 904 Recycling Performance Grants
- Grants program supported by \$2 per ton disposal surcharge
- >\$35-40 million in monies awarded per year

Plan Organization:

- Plan development and organizational requirements very prescriptive
- Executive summary and 13 chapters
- Includes appendices
- 10-year planning horizon

1. Description of the waste. This means tons and contents of municipal waste that will be generated in the county, including waste from special events
2. Description of facilities. An analysis of the facilities currently used by the county.
3. Estimated future capacity. An analysis of the potential county need for capacity.
4. Description of Recycling Program. Development of means to meet the 35% goal by 2003.
5. Selection and Justification of Municipal Waste Management Program. An analysis of the county's program, including facility selection and cost of disposal.
6. Location. The identification and locations of available facilities.
7. Implementing Entity Identification. Who will be responsible for implementing the plan on behalf of the county?
8. Public Function. Justification of and mechanisms to implement public ownership or public function in municipal waste processing or disposal, if proposed.
9. Copies of Ordinances and Resolutions.
10. Orderly Extension. An analysis of how the county's waste management system is coordinated with other county plans, ordinances and programs.
11. Methods of Disposal Other Than by Contracts.
12. Non-Interference. A discussion of how the county's plan will not interfere with existing facilities.
13. Public Participation. Advertisements, hearing minutes, SWAC meetings, notices, other public information documents.

Philadelphia's Current Act 101 Plan

6

- Developed 2013 through 2016
 - Executive Order 15-08
 - Philly Greenworks
 - Council bills & resolution
 - Zero Waste & Litter Plan
 - SWRAC input
- Submitted to DEP for review March 2017
- June 2017 DEP and City agreed to revise plan to incorporate 2019 disposal contract awards
- Staff edits & updates through mid-2018



Philadelphia Act 101 Plan: Update

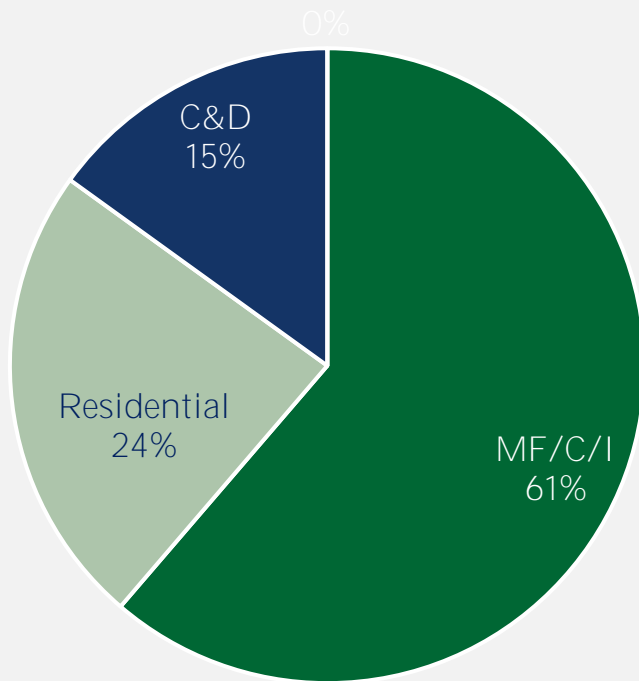
7

- 2019-2028 planning horizon
- Waste composition
- Program updates:
 - Residential services
 - Zero Waste & Litter Cabinet initiatives
 - Greenworks
 - City institutions (Prisons, PHL, SDP, PWD)
 - Education & outreach
- Updated bio-solids data
- New disposal agreements
 - Covanta
 - Waste Management
- New MRF contract:
 - Updates on recovered materials end-markets
 - Recyclables composition
- MSW generation projections and disposal capacity

Philadelphia MSW Generation* 2018

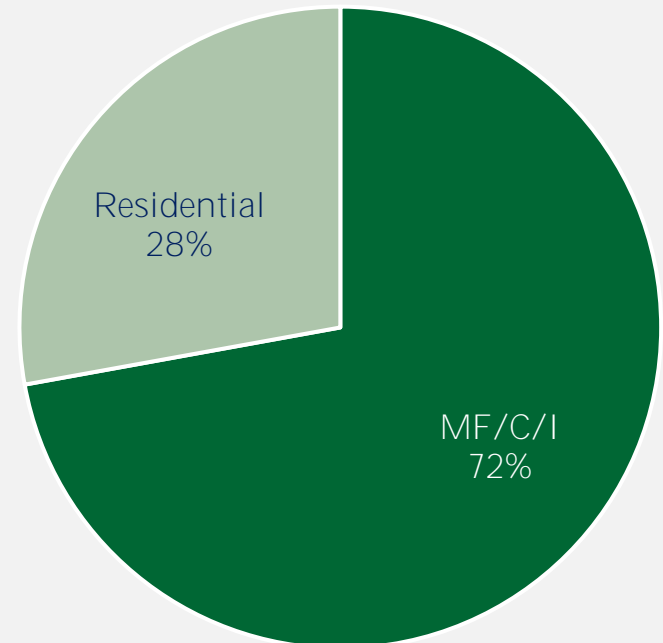
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With C&D: ~2.61 million tons



■ MF/C/I ■ Residential ■ C&D ■

Without C&D: ~2.22 million tons

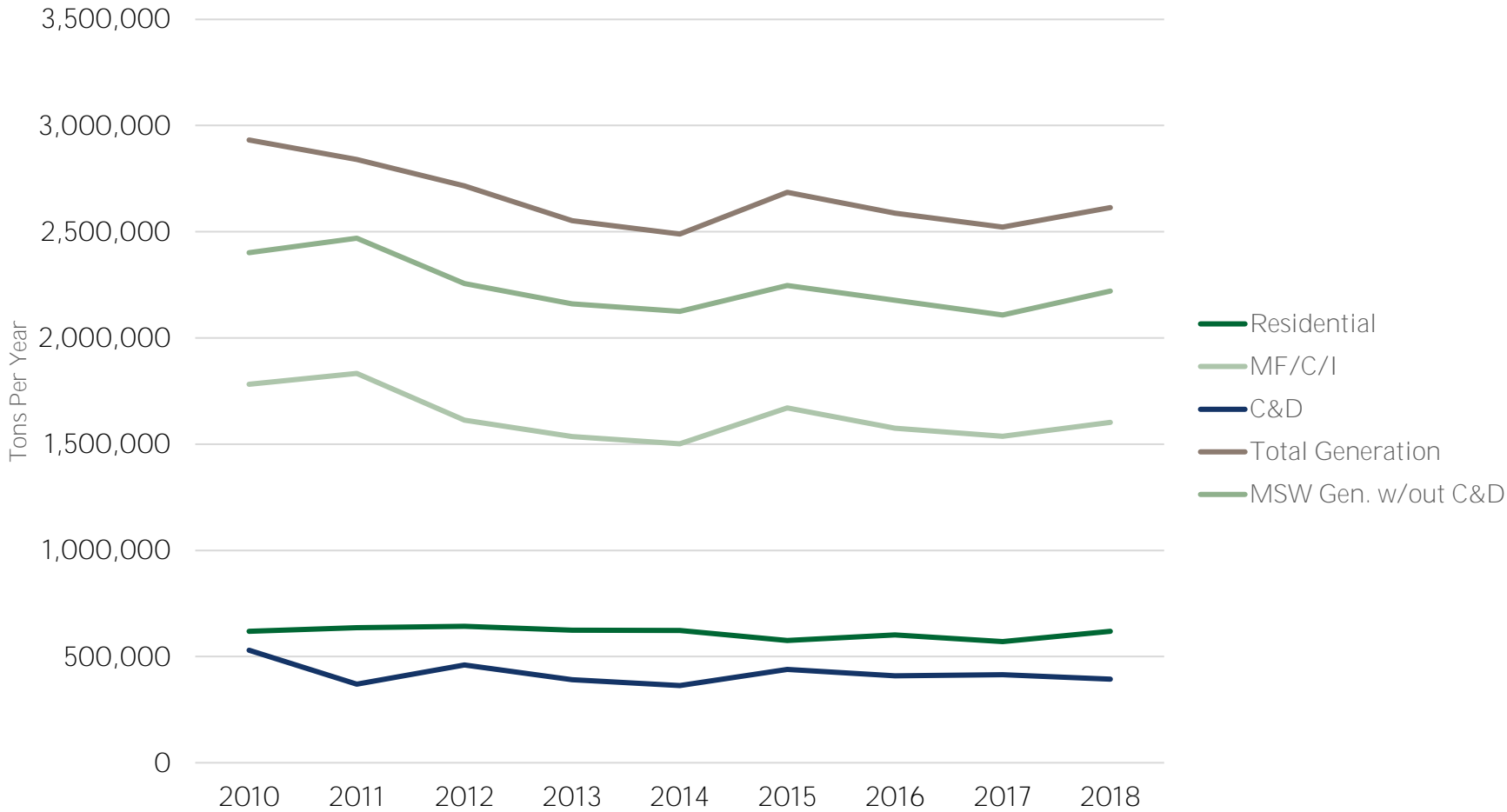


■ MF/C/I ■ Residential

* MSW Generation = Disposed + Recycled/Composted

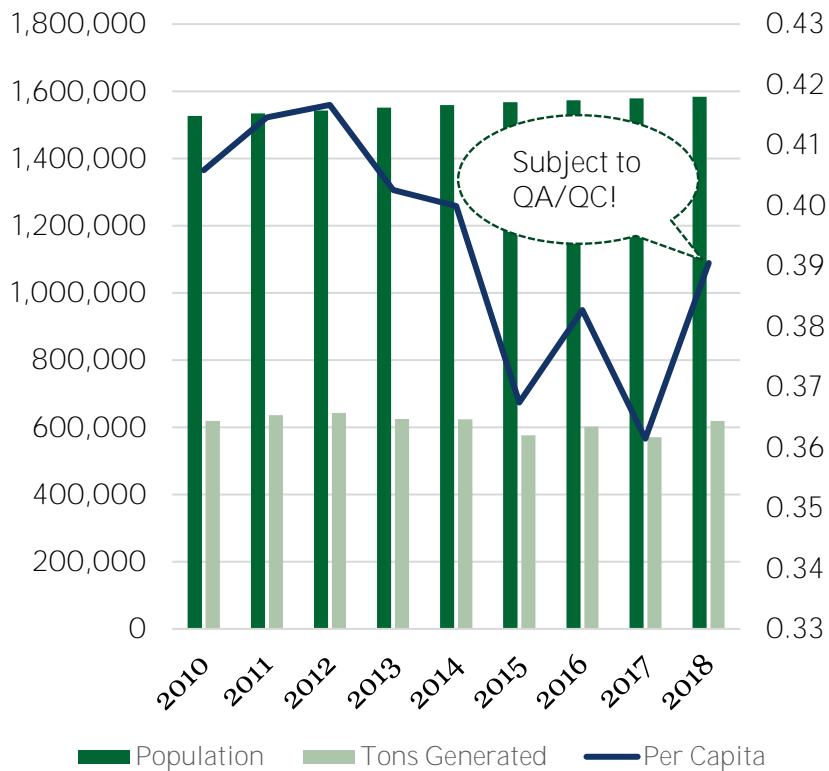
Philadelphia MSW 2010-2018

9

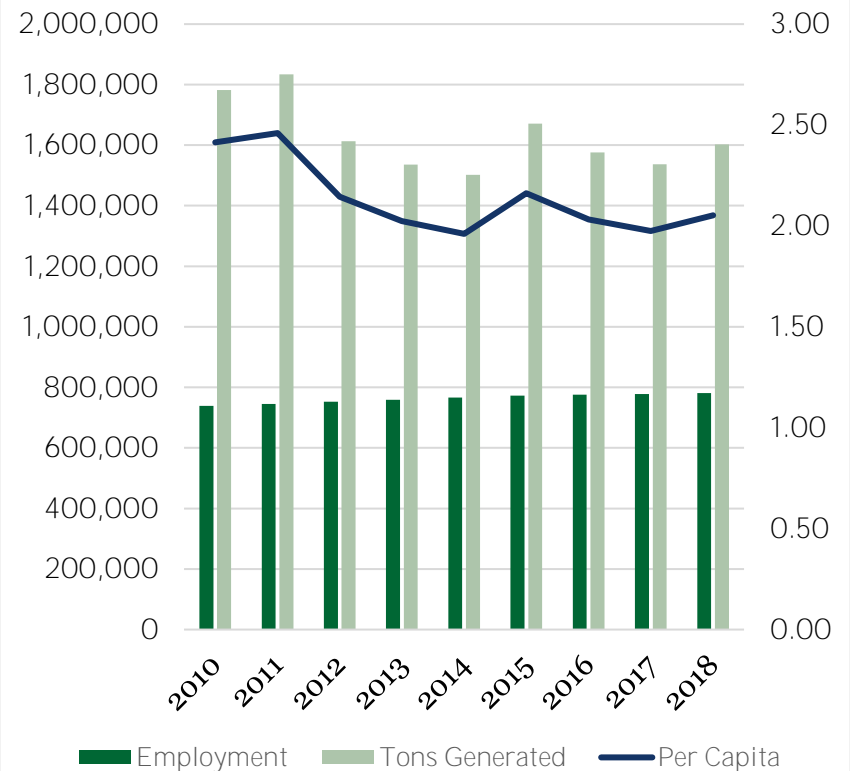


Residential vs. MF/C/I Generation

Residential Generation



MF/C/I Generation



Where Does the Tonnage Data Come From?

11

Residential & City Operations

- ✓ Curbside trash
- ✓ Curbside recyclables
- ✓ Residential yard wastes
- ✓ Drop-off centers
- ✓ HHW & e-cycling
- ✓ City-serviced buildings and facilities
- ✓ Special events & cleanups

MF/C/I

- Trash: quarterly disposal reports to DEP
- C&D disposal: quarterly disposal reports to DEP
- *Recyclables: Annual reports from recyclables processors, private haulers, scrap dealers, large generators, etc.*

Estimating Future Capacity

Future capacity
estimated based on:

- DVRPC population and employment forecasts
- Applied to base year generation
- MSW will square with 2019 data
- City will need to evaluate overall tons as well as tons by generator post COVID-19

	Base Year							
	2018	2019	2020	2021	2023	2025	2027	2028
Population Forecast ^[1]	1,583,849	1,589,318	1,594,787	1,599,193	1,608,004	1,616,816	1,627,678	1,633,109
Employment Forecast ^[1]	780,924	783,616	786,308	788,478	792,817	797,156	802,523	805,207
Gross Waste (tons)								
Residential	618,513	604,559	606,639	608,315	611,667	615,019	619,151	621,216
Commercial	1,602,208	1,595,436	1,600,917	1,605,334	1,614,169	1,623,003	1,633,931	1,639,395
Total Gross Waste	2,220,720	2,199,995	2,207,556	2,213,649	2,225,836	2,238,022	2,253,082	2,260,611
Recycling Quantities								
Percent Recycled	42%	43%	44%	45%	47%	49%	51%	52%
Tons Recycled	924,877	938,246	963,546	988,342	1,038,300	1,088,745	1,141,132	1,167,552
Net Discards Requiring Disposal	1,295,843	1,261,749	1,244,010	1,225,307	1,187,536	1,149,277	1,111,949	1,093,059

Note: Years 2022, 2024 & 2026 obscured to allow for table to fit on slide

Act 101 Plan Update Timeframe (revised)

13

Planning Activity	Timeframe
Meeting with PA DEP	August 2019
SWRAC meeting #1	September 2019
DEP quarterly progress report #1	October 2019
SWRAC update	November 2019
Draft plan submittal to City staff; review session	February 2020
DEP quarterly progress report #2	February 2020
SWRAC update	May 2020
DEP quarterly progress report #3	May 2020
Draft plan transmittal to SWRAC	Mid-late June 2020
<i>30-day review & comment</i>	
Submittal to PA DEP	July-August 2020

Thank You and Questions?

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Phil Bresee, Sr. Consultant

pbresee@mswconsultants.com





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

-
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 - Budget
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9/17/2020

11/19/2020

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