



pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Bureau of Waste Management

Overview of the Bureau of Waste Management

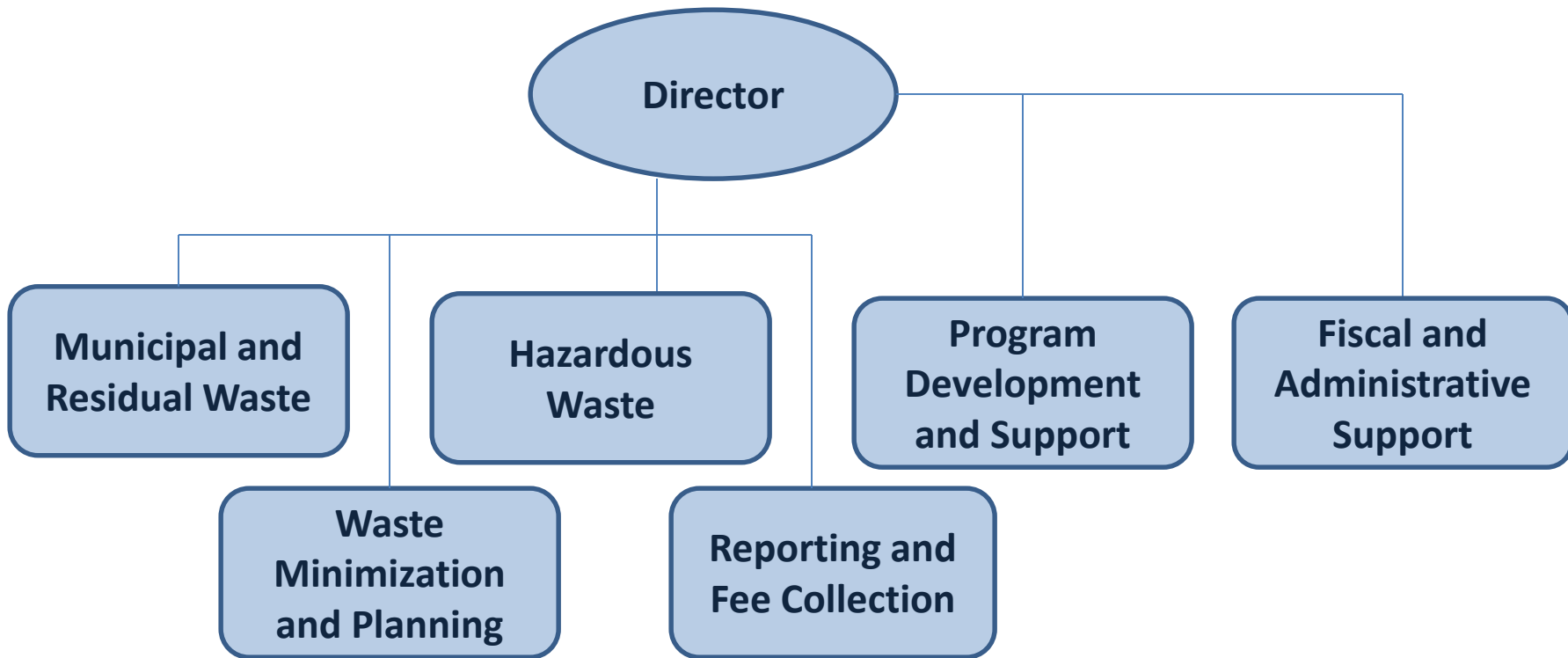
Citizens Advisory Council

March 20, 2018

Tom Wolf, Governor

Patrick McDonnell, Secretary

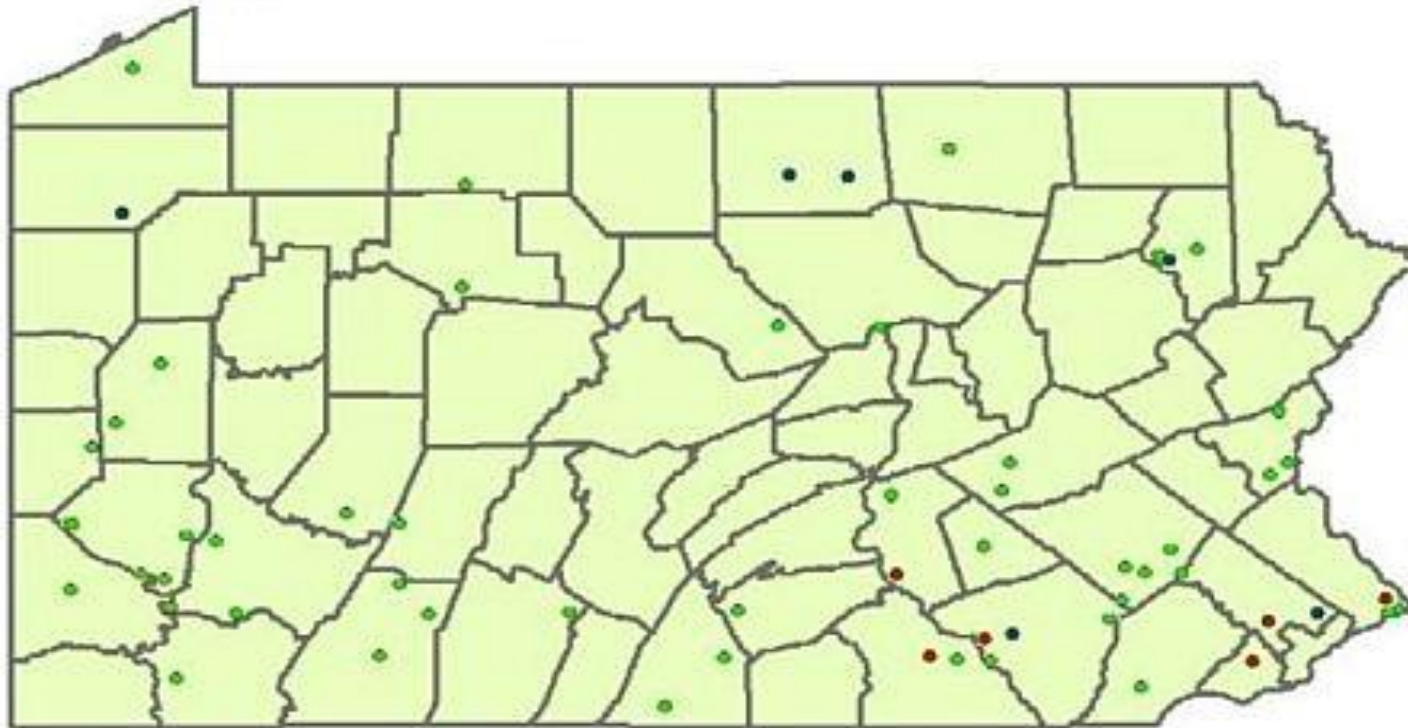
Organizational Chart



Staffing

- **47 total positions, including:**
 - 6 vacancies
 - 2 contractors
- **Out of 41 positions currently filled:**
 - 6 eligible to retire now (15%)
 - 2 eligible to retire in 1 year (5%)
 - 1 eligible to retire in 2 years (2%)
 - 3 eligible to retire in 3 years (7%)
 - **12 eligible to retire in 4 years or less (29%)**

Waste Facilities



- Municipal Waste Landfills
- Construction and Demolition Waste Landfills
- Resource Recovery (Waste-to-Energy) Facilities

Waste Facilities

- **Municipal Waste (MW)**
 - Landfills (LFs), including Construction/Demolition
 - Transfer Stations
 - Incinerators/Resource Recovery Facilities (RRFs)
 - Regulated Medical & Chemotherapeutic (RMCW)
- **Residual Waste (RW)**
 - LFs (captive and noncaptive)
 - Disposal Impoundments
 - Incinerators
 - Other processing/disposal

Waste Facilities

- **Hazardous Waste (HW)**
 - Treatment/Storage/Disposal Facilities (TSDFs)
 - LFs (captive and noncaptive)
 - HW Transporters
 - Historic Facilities
- **Other**
 - MW Transporters
 - Waste Tire Facilities
 - Waste Tire Transporters

Landfill Tipping Fees

- **Recycling Fee**

- \$2/ton on waste managed at MW landfills and resource recovery facilities
- Deposited into the Recycling Fund
- Sunset date extended indefinitely October 2017 by Act 40, which amended the Administrative Code

- **Environmental Stewardship Fee**

- \$0.25/ton on waste disposed at MW landfills
- Deposited into the Environmental Stewardship Fund

Landfill Fees

- **Disposal Fee for Municipal Waste Landfills**
 - \$4/ton on waste disposed at MW landfills
 - Deposited into the Environmental Stewardship Fund
- **Host Municipality Benefit Fee**
 - \$1/ton on waste managed at MW landfills or other waste processing/disposal facilities
 - Paid to the host municipality

Waste Disposal Trends (2006-2016)

- **Overall amount being disposed has decreased 11%**
 - 24.1 M tons in 2006
 - 21.4 M tons in 2016
- **Waste disposed that was generated in PA has decreased 7%**
 - 15 M tons in 2006
 - 13.9 M tons in 2016

Waste Disposal Trends (2006-2016)

- **MW generated in PA has decreased 15%**
 - 10.3 M tons in 2006
 - 8.7 M tons in 2016
- **RW generated and disposed in PA has increased 39%**
 - Primarily drill cuttings from unconventional gas well drilling
 - 1.8 M tons in 2006
 - 2.5 M tons in 2016

Waste Disposal Trends (2006-2016)

- **Waste disposed that was generated outside PA has decreased 18%**
 - 9.2 M tons in 2006
 - 7.5 M tons in 2016
- **Amount of waste being landfilled has decreased 14%**
 - 21.1 M tons in 2006
 - 18.1 M tons in 2016

Waste Disposal Trends (2006-2016)

- **Waste disposed at Resource Recovery Facilities (RRFs) has increased 10%**
 - 3.0 M tons in 2006
 - 3.3 M tons in 2016
- **BWM will continue to monitor waste disposal and recycling trends**
 - Accurate measure of how programs are performing
 - Provide information to interested parties and the public

Landfill Disposal Capacity

- **As of December 31, 2016***
 - Average waste disposed per year from 2012 to 2016 was 16.5 million tons (+/- 1 million tons)
 - Approximately 350 million tons in permitted capacity (+/- 10 million tons)
 - Approximately 45% of the total permitted capacity remains available for use (+/- 1.5%)
 - Based on annual waste disposed, remaining lifetime of current landfills is 21 years (+/- 1 year)

* 2017 data currently being reviewed/compiled

Recycling

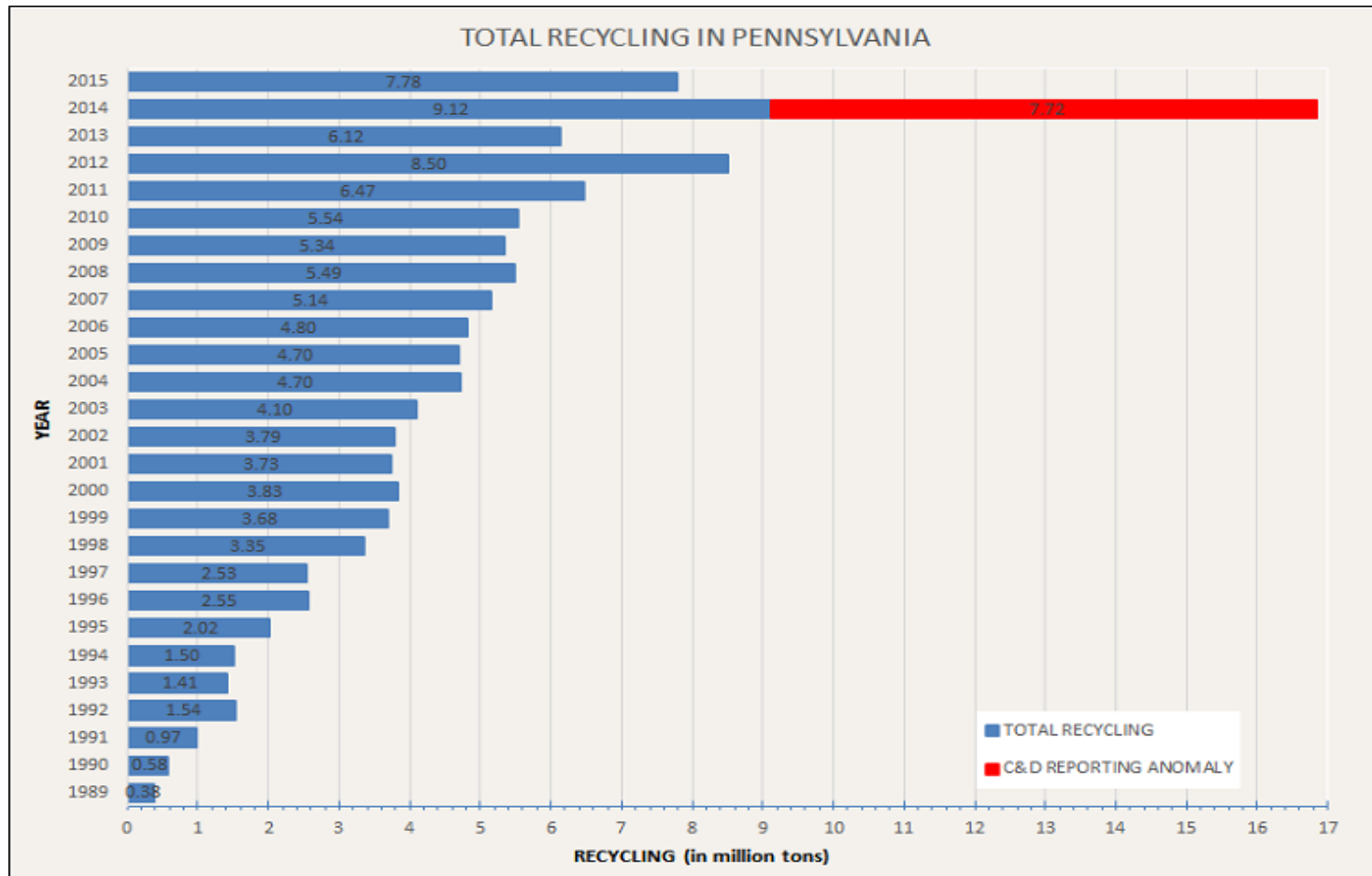
- **Over 11.6 M residents (97% of the state) have access to recycling:**
 - Approximately 79% have convenient access through ~1,000 curbside programs
 - 955 drop-off programs extend recycling to additional communities across the commonwealth

Recycling

- ***The Economic Contributions of Recycling to the Pennsylvania Economy (June 2017)*:***
 - In 2014, PA collected, processed, and marketed 17.4 million tons of recycled materials.
 - In 2015, PA's recycling marketplace directly employed over 66,000 people and stimulated 110,000 indirect and induced jobs.
 - Also in 2015, PA's recycling marketplace contributed \$22.6 billion to PA's gross state product.

*Commissioned by PA Recycling Markets Center

Recycling Trends





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Bureau of Waste Management

Division of Municipal & Residual Waste

▶ Division of Municipal & Residual Waste

- **Oversees the statewide permitting and regulation of municipal and residual waste disposal and waste processing facilities**
 - 50 landfills
 - 6 resource recovery facilities
 - 72 transfer facilities
- **Manages and implements DEP's TENORM disposal protocol**

▶ Division of Municipal & Residual Waste

- **Manages and implements Pennsylvania's beneficial use program**
 - Developing new and maintaining existing general permits for the processing and beneficial use of municipal and residual waste
 - Approximately 102 beneficial use permits
 - Approximately 346 beneficial use facilities

➤ Division of Municipal & Residual Waste

- **Oversees the statewide Waste Tire Program**
 - Manages and facilitates the cleanup of priority tire piles
 - Since the program's inception, 20 tire piles have been remediated and DEP has successfully recycled or disposed of over 40 million waste tires.
 - After FY 2017-18, two sites will remain on the priority waste tire pile list. Approximately 700,000 tires are estimated at these two remaining sites.

➤ Division of Municipal & Residual Waste

- **Oversees the statewide Waste Tire Program**
 - Tire hauler authorizations
 - Approximately 300 waste tire authorizations issued annually
 - Perform compliance checks on applicants and existing haulers
 - Compliance assistance to tire haulers and DEP regional offices
 - Liaison with other state tire programs

▶ Division of Municipal & Residual Waste

- **Develops and interprets DEP waste regulations**
 - Liaison with Regional offices
 - Promote statewide consistency
 - Update technical guidance documents, policies, procedures, and fact sheets
- **Evaluates coproduct determinations, de-wasting requests & Form U waiver requests**

▶ Division of Municipal & Residual Waste

- **Coordinates with other DEP programs:**
 - *Oil and Gas Program:* permitting and regulation of wastes generated by drilling operations.
 - *Clean Water Program:* permitting and regulation of industrial wastewater treatment/storage facilities and biosolids operations.
 - *Mining Program:* beneficial use of wastes in mine reclamation and permitted mine sites.

Management of Fill Policy (MoFP)

- Current effective version is dated August 7, 2010.
- Designed to define the universe of fill materials that must be managed as wastes under the SWMA versus fill materials that may be used in an unrestricted manner.

▶ MoFP – Previously Proposed Changes

- **DEP proposed changes to the MoFP on December 20, 2014**
 - Changes predominantly involved modifying numeric standards and testing procedures.
 - Proposed numeric standards were based on 2011 revisions to Act 2 standards.
- **Extensive public comment received on proposed changes**

▶ MoFP – Previously Proposed Changes

- Act 2 standards were revised again on August 27, 2016.
- Due to the number and substance of public comments submitted on the changes proposed in 2014, DEP plans to publish a draft MoFP for public comment later this year.

▶ MoFP – Changes Under Consideration

- Incorporate Act 2 standards by reference
- Include a mechanism for determining that exceedances of the numeric limits may be due to background concentration.
- Develop a quick reference table as a companion to the policy that provides constituent limits from Act 2.

▶ MoFP – Changes Under Consideration

- **Revise Appendix A to provide sampling instructions for waste piles vs. in-situ material**
 - Development of a sampling plan
 - Existing sampling language for storage piles
 - New sampling language for in-situ material
 - Include SPLP as a method to determine alternative soil-to-groundwater value

▶ MoFP – Changes Under Consideration

- Clarify how the policy applies to fill that has already been placed
- Incorporate language from Form FP-001 and FAQs currently on DEP's website into the policy
- Clarify definitions and terms not defined by the policy



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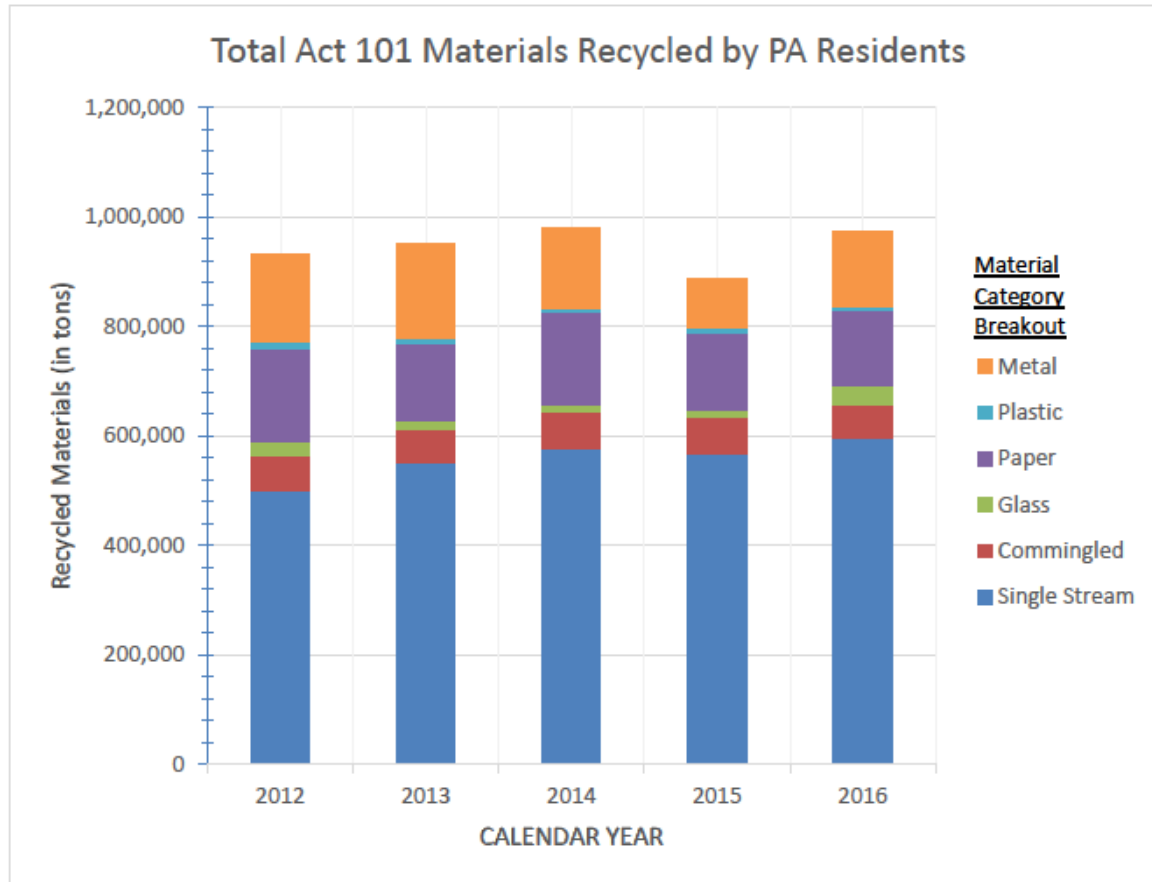
Division of Waste Minimization & Planning

▶ Division of Waste Minimization & Planning

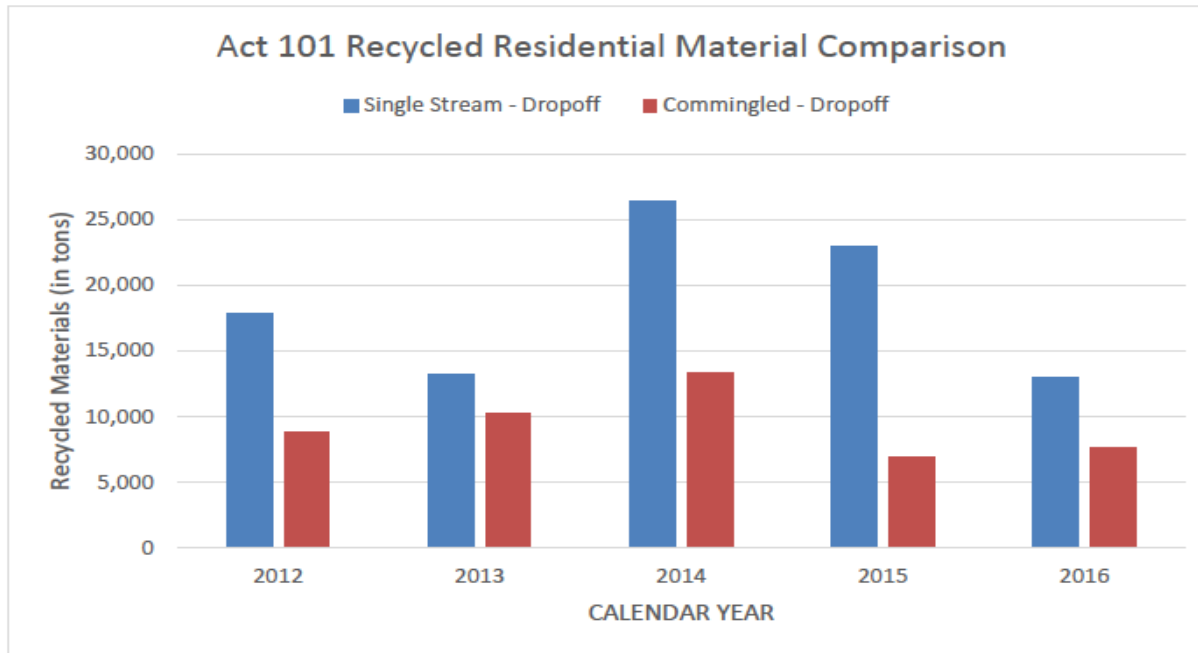
- **Municipal Recycling**

- 472 local governments overall required to recycle under Act 101
- 771 communities voluntarily recycle for a total of 1,143 municipalities who are currently recycling
- Nearly 12M Pennsylvanians actively recycle

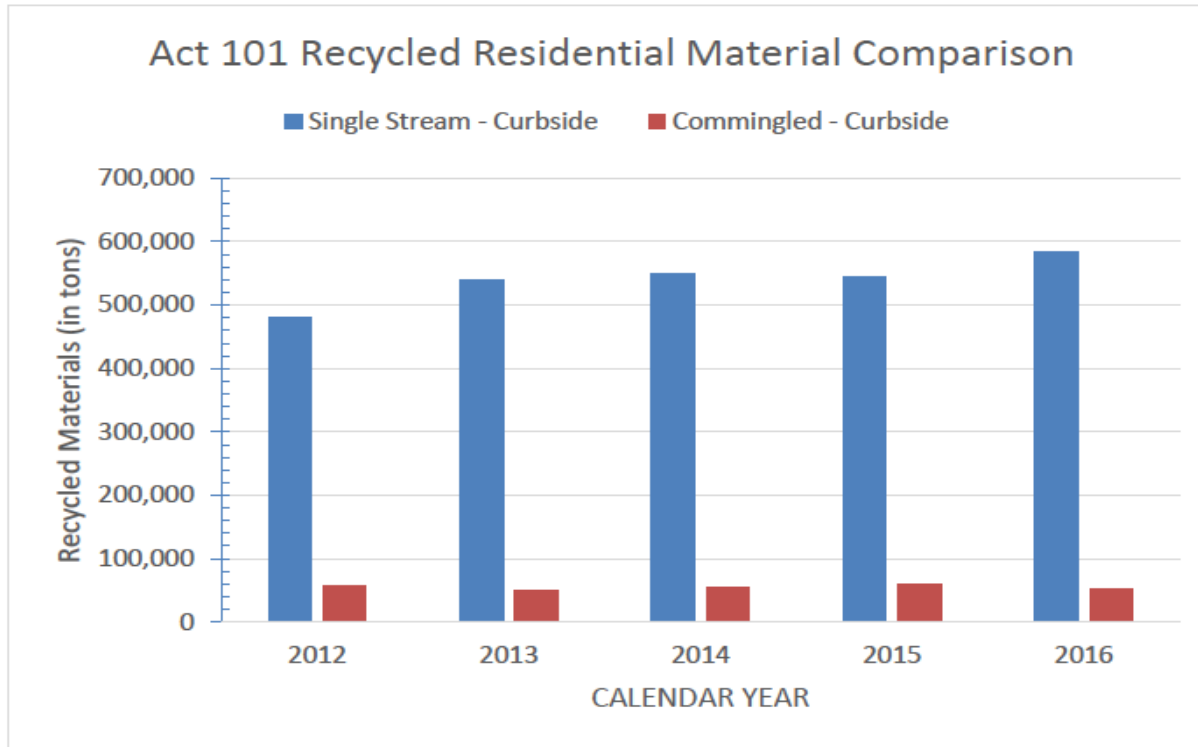
Recycling Trends



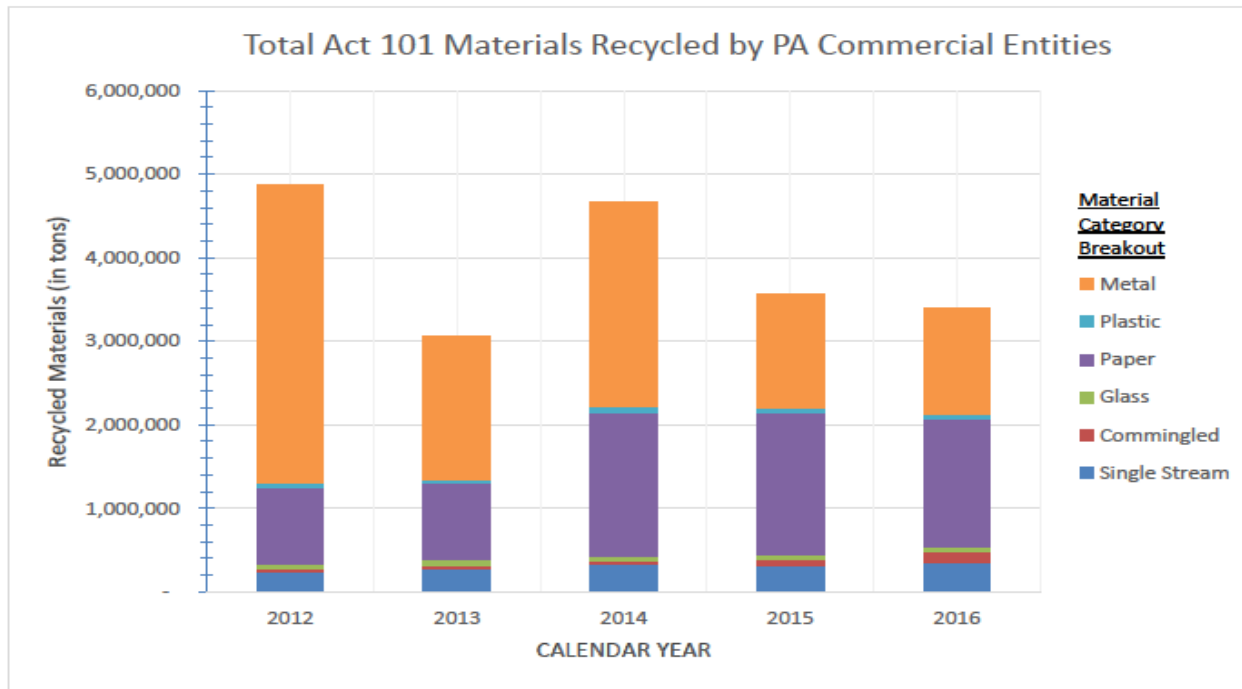
Recycling Trends



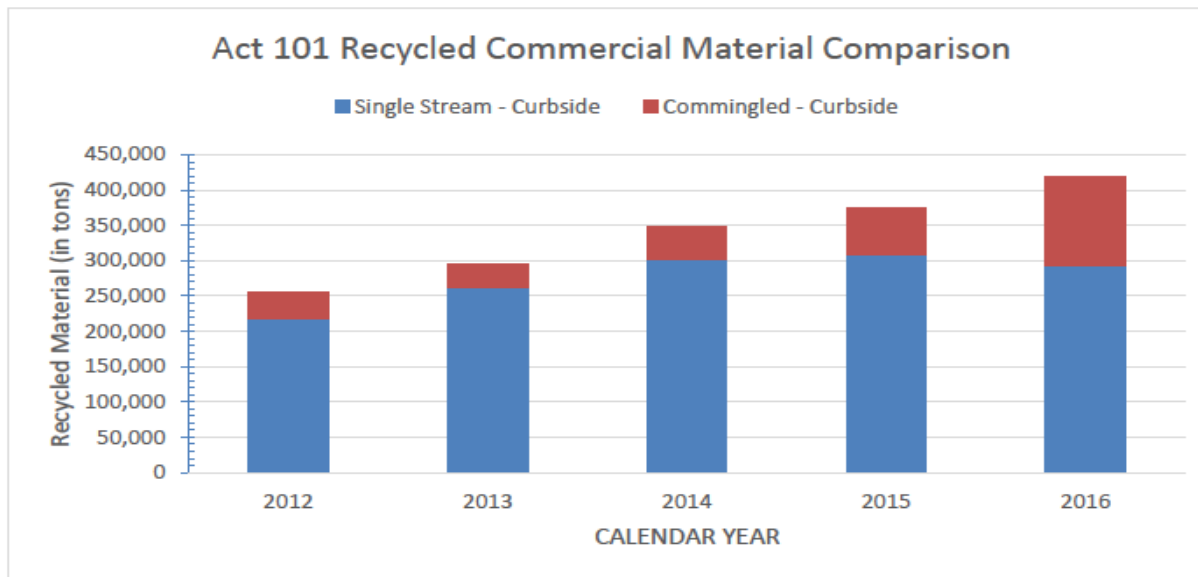
Recycling Trends



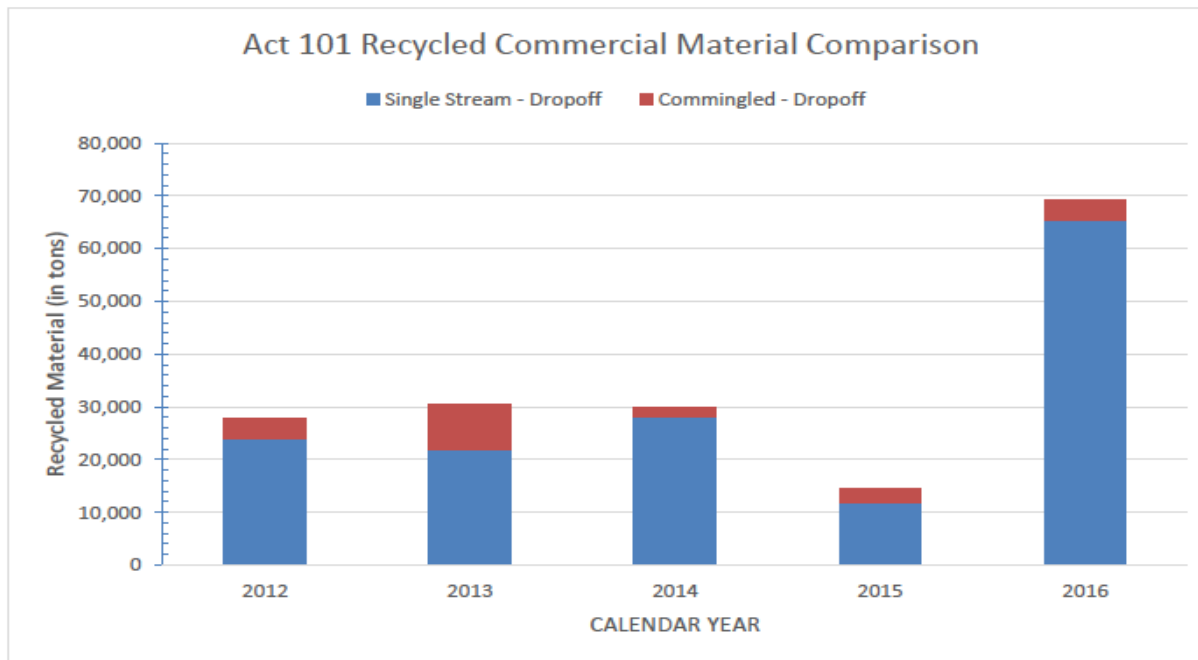
Recycling Trends



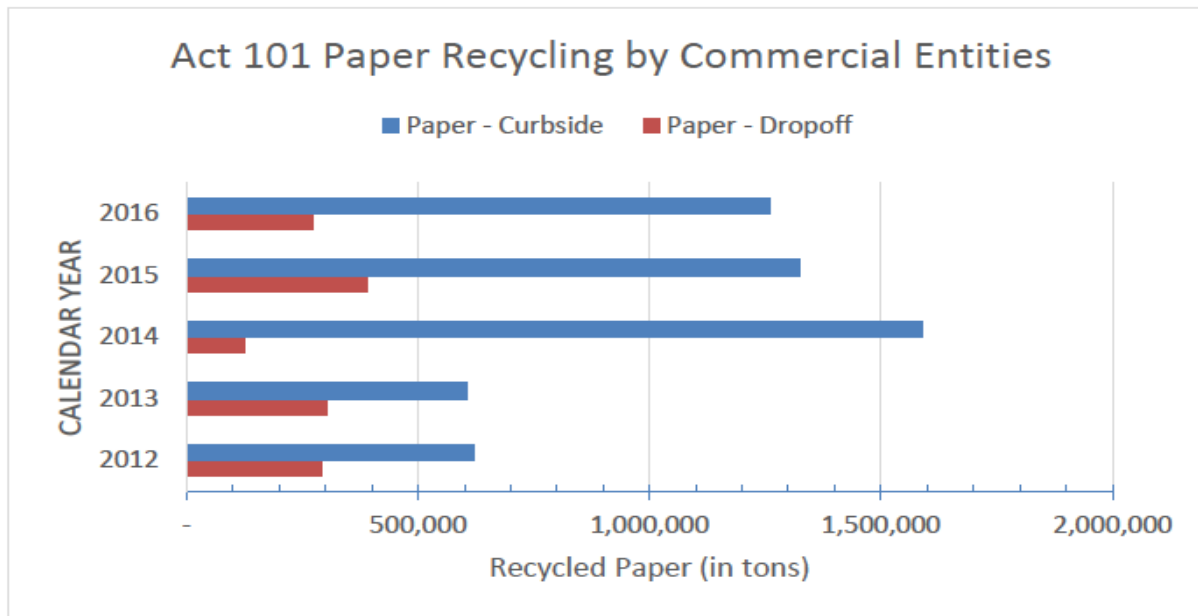
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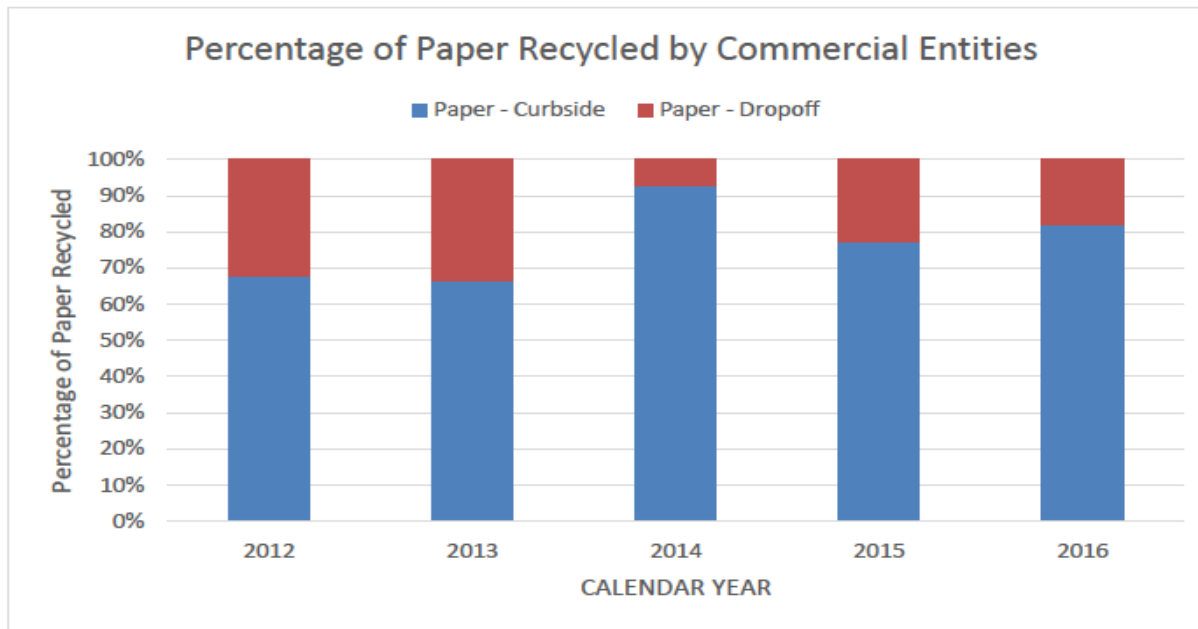
Recycling Trends



Recycling Trends



Recycling Trends



Act 101 Recycling Grants

- **Act 101 Grants**

- Section 901, County Planning Grants
- Section 902, Recycling Program Development and Implementation Grants
- Section 903, County Recycling Coordinator Grants
- Section 904, Recycling Performance Grants
- Section 1102, Host Inspectors Grants
- Section 1110, Independent Evaluation of Permit Grants

Act 101 Recycling Grants

- **Section 902 Grants**

- \$30 Million Offering in FY 17/18 to support local government Municipal Recycling Implementation Grants
- 2018 applications due April 7, 2018
- Reimbursement, competitive grant program
- Primarily funds equipment-related costs
- Reduction in available grant funds due to decrease in fees collected

Act 101 Recycling Grants

- **Section 904 Grants**

- Recycling Performance Grants available to all local governments with recycling programs
- Grant rewards communities based on materials recycled each year
- \$19.5m budgeted for FY 17/18
- Applications due September 28, 2018 for materials collected in calendar year 2017

Recycling Fund

- **Recycling Fund Budget**

- Projected Fund income approximately \$38 Million
- \$500K annual increases for growth in Section 904 Grants
- Public Education increase for convenience center funding
- Slight increase in Section 902 Grants to facilitate restart of program.
- \$1 million extra in Section 903 Grants to return to calendar year payments (funds were inadvertently liquidated in years past)

Covered Device Recycling Act (CDRA)

- **“Producer Responsibility Model:”**
 - Requires manufacturers of covered electronic devices to recycle an amount of electronic waste material proportionate to the total weight of new devices sold annually in Pennsylvania
- **Manufacturers offering sale of a covered electronic device in Pennsylvania must:**
 - Complete and submit an annual CDRA Registration Form
 - Remit a \$5,000 Registration Fee

Covered Device Recycling Act (CDRA)

- **Annual Responsibilities of the Manufacturer**
 - By August 31 prior to the program year, submit:
 - Completed Registration Form, citing the total weight of annual sales in Pennsylvania from two years prior
 - Registration Fee of \$5,000
 - Recycling Plan, outlining the collection points, recyclers and end processors contracted to collect, transport and recycle material on the manufacturer's behalf for the associated program year
 - By January 31 following the close of program year, submit:
 - An Annual Report, confirming the manufacturer's adherence to the CDRA Recycling Plan as approved

Covered Device Recycling Act (CDRA)

Total Registered Manufacturers (by Program Year)

2012: **58** Manufacturers

2013: **61** Manufacturers

2014: **75** Manufacturers

2015: **61** Manufacturers

2016: **55** Manufacturers

2017: **61** Manufacturers (unofficial)

Covered Device Recycling Act (CDRA)

Obligation Percentage & Total Pounds Recycled (by Program Year)

2012: **35%** of 2010 Sales, **31.5M** Pounds Recycled
2013: **50%** of 2011 Sales, **43.5M** Pounds Recycled
2014: **86%** of 2012 Sales, **62.5M** Pounds Recycled
2015: **100%** of 2013 Sales, **62.4M** Pounds Recycled
2016: **100%** of 2014 Sales, **62.7M** Pounds Recycled



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Bureau of Waste Management

Division of Hazardous Waste

Division of Hazardous Waste

- **Oversees implementation of PA's Hazardous Waste Program**
 - Facility permit program conducted by Regional Offices
 - Inspections and enforcement activities conducted by Regional Offices
 - PA's Hazardous Waste Program is authorized by U.S. EPA to be implemented in lieu of the federal program

Division of Hazardous Waste

- **Provides regulatory assistance and interpretation to regulated entities, regional office staff, and the public**
 - Hazardous waste determination issues
 - Hazardous waste recycling exclusions & exemptions
 - Interfaces with the federal hazardous waste program and PA's residual waste program
 - Assures statewide consistency to the maximum extent possible

Division of Hazardous Waste

- **Ensures that the obligations and commitments of PA's U.S. EPA hazardous waste agreement are fulfilled**
 - Permit obligations for hazardous waste storage, treatment & disposal facilities (issuances, re-issuances, modifications)
 - Compliance assistance, monitoring & enforcement
 - Waste minimization and sustainability efforts
 - Corrective action work-sharing efforts in conjunction with EPA Region 3

Division of Hazardous Waste

- **Supported by the Hazardous Sites Cleanup Fund**
- **Further supported through a Federal Resource Conservation and Recovery Act (RCRA) Grant from EPA**
 - Runs on 3-year cycle (current FFY17-19)
 - 75/25 match (EPA/DEP)
 - Current funding
 - EPA: \$4,740,000/year
 - DEP: \$1,580,000/year

Division of Hazardous Waste

- **Under the RCRA Grant, DEP develops/implements annual Work Plan**
 - Administrative & Program Planning
 - Authorization
 - Corrective Action
 - Data Management
 - Enforcement
 - Permitting
 - Sustainable Materials Management

Compliance & Information Mgmt.

- Maintain HW compliance and enforcement data in eFACTS and its translation to RCRAInfo
- Compliance assistance for regional staff and regulated community
- Notification of RCRA Subtitle C activities (Site Identification Form/8700-12)
- HW and RMCW transporter licensing

Permitting & Technical Support

- Oversight of the Pennsylvania Hazardous Waste Permit Program (TSD facilities)
- New commercial hazardous waste permits (Siting Team)
- Solid waste variances and petitions to delist hazardous waste
- Corrective Action Site workshare with EPA

Permitting & Technical Support

- **Regulatory compliance assistance**
 - Hazardous waste determination issues
 - Hazardous waste exclusions and exemptions
 - Permit requirements
 - Regulatory interpretation
- **Hazardous waste minimization and sustainable materials management**
 - Mercury Thermostat Program
 - School Chemical Cleanout Campaign (SC3)

HW Generator Improvements Rule

- **Pennsylvania is an incorporation by reference state under PA Code Title 25 §260a.3(e).**
 - Rule became effective in Pennsylvania on May 30, 2017
 - Formal rulemaking is not required for DEP to adopt the Rule
- **DEP inspectors are using updated inspection reports**

HW Generator Improvements Rule

- **Provides for reorganization of the hazardous waste regulations**
 - CESQG under § 261.5 → VSQG under § 262.14
 - SQG under § 262.34 → now under § 262.16
 - LQG under § 262.34 → now under § 262.17

HW Generator Improvements Rule

- **Provides alternative standards for episodic generation (Part 262, Subpart L)**
 - Allows a VSQG or SQG to maintain existing generator category in the event of a planned or unplanned episodic generation event
 - One episodic event per calendar year
 - Notification per NEW Form 8700-12
 - Appropriate Marking/Labeling of containers or tanks with the words “Episodic Hazardous Waste”

HW Generator Improvements Rule

- **Provides for VSQG waste consolidation**
 - Consolidate waste at an LQG under the control of the same person
 - No hazardous waste manifest is required and hazardous waste transporters do not have to be used

Definition of Solid Waste (2015)

- ***American Petroleum Institute v. EPA***
 - 2-1 decision by U.S. Court of Appeals for the D.C. Circuit issued on July 7, 2017
 - Affected portions of the 2015 EPA Definition of Solid Waste:
 - Vacated the Verified Recycler Exclusion, except for its emergency preparedness provisions and its expanded containment requirement
 - Reinstated the Transfer-Based Exclusion



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Bureau of Waste Management

Division of Reporting & Fee Collection

▶ Division of Reporting & Fee Collection

- **Processes Quarterly Operations and Fee Reports**
 - Hazardous Waste Transportation Reports
 - 200/quarter
 - Approximately 50% submitted electronically
 - \$1,300,000/yr. – HSCA Fund
 - Cross reference with Hazardous Waste Manifest information

Division of Reporting & Fee Collection

- **Processes Quarterly Operations and Fee Reports (cont.)**
 - Hazardous Waste Treatment, Storage and Disposal Reports
 - 18/quarter
 - 72% submitted electronically
 - \$600,000/yr. – HSCA Fund

Division of Reporting & Fee Collection

- **Processes Quarterly Operations and Fee Reports (cont.)**
 - Municipal Waste Landfill and Resource Recovery Reports
 - 51/quarter
 - 75% submitted electronically
 - \$36 million/yr. Recycling Fund
 - \$62 million/yr. Environmental Stewardship Fund
 - 20.9 million tons in 2012

Division of Reporting & Fee Collection

- **Processes Residual Waste Biennial Reports**
 - Over 2000 generator reports
 - Approximately 45% submitted electronically
 - 22,300,00 tons/yr. generated (2010 non-wastewater)

Division of Reporting & Fee Collection

- **Processes Hazardous Waste Biennial Reports**
 - Over 850 reports (2011)
 - Approximately 70% submitted electronically
 - 308,720 tons/yr. generated
 - 262,668 tons/yr. shipped
 - 428,355 tons/yr. received
 - Hazardous Waste Facility Plan
- **Processes Hazardous Waste Manifests**
 - Over 50,000/yr.
 - Verify fee and biennial report data

Division of Reporting & Fee Collection

- **Waste Transportation Safety Program**
 - [Act 90](#) of 2002 requires vehicles > 17,000 gross registered vehicle weight (GVW) or Trailers > 10,000 GVW transporting municipal or residual waste to waste processing or disposal facilities in Pennsylvania to have a valid Waste Transporter Authorization.
 - Annual \$100 authorization fee for each waste vehicle and \$50 fee for each tractor and trailer.

Division of Reporting & Fee Collection

- **Waste Transportation Safety Program (cont.)**
 - Authorization Program:
 - 38,247 authorized vehicles
 - \$3 million/year in revenue
 - Process over 7,000 authorizations/year
 - 75% of renewals and almost 85% of addendums are submitted electronically
 - Average processing time < 2 days

Division of Reporting & Fee Collection

- **Waste Transportation Safety Program (cont.)**
 - Compliance Program:
 - 6,721 DEP WTSP inspections → 86.8% compliance rate
 - 13,673 Pennsylvania State Police (PSP) Motor Carrier Safety Assistance Program inspections
 - 68.2% compliance rate (better than other commercial vehicles)
 - 5,778 citations issued
 - 217 drivers placed out-of-service
 - 1,726 vehicles placed out-of-service



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Bureau of Waste Management

Program Development & Support Section

Program Development & Support

- **Assists the Bureau**
 - Legislation tracking
 - RTK Liaison
 - IT Liaison
 - Information requests for application development
 - Web postings
 - Website development (internal/external)
 - Solicit/compile information for Executive Staff

Program Development & Support

- **Assists the Divisions with Special Projects**
 - Regulatory revisions
 - Updates to documents
 - Technical Guidance
 - Policies
 - Fact Sheets
 - TENORM tracking & data analysis
 - Promote program consistency

Program Development & Support

- **Work with Keep Pennsylvania Beautiful**
 - Great American Cleanup of PA
 - International Coastal Cleanup
 - Adoption Programs
 - Illegal Dump Surveys – Follow-up
- **Anti-Litter Campaign**
 - DEP/PennDOT/DCNR/KPB
 - Litter Study

Program Development & Support

- **Host Municipal Inspector Program**
 - Provide certification training
 - Review grant applications
- **SWAC/RFAC Liaison**
 - Coordinate and organize meetings
 - Develop meeting agendas and materials
 - Approve travel-related expenses
 - Administration of Bylaws

Program Development & Support

- **Act 101 Workgroup**
 - Convened June 2017
 - Focus on modernizing Act 101
 - Meet during regular SWAC meetings
 - Special meetings as needed
 - Advise DEP on statutory changes to Act 101

Contact Information

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Questions?

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(717) 787-9870