



D E P A R T M E N T O F  
**ENVIRONMENTAL  
PROTECTION**  
Montgomery County, Maryland



***DIVISION OF SOLID WASTE SERVICES***

***QUARTERLY REPORT***

***JULY, AUGUST, AND SEPTEMBER 2015***

(1<sup>st</sup> Quarter of FY16)



The Montgomery County Division of Solid Waste Services (DSWS) received the “2015 Gold Excellence Award” for the County’s “Integrated Solid Waste Management System” from the Solid Waste Association of North America (SWANA). The award was received at a ceremony held September 25, 2015.

DSWS staff members and Recycling Volunteers interacted with a record 9,346 patrons at the Montgomery County Agricultural Fair in August. Visitors to the exhibit were able to discuss waste reduction, reuse, recycling, composting and buying recycled topics in detail, play the recycling trivia game, and make crafts from repurposed items.

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# **OVERVIEW**

## **Tonnage at a Glance**

The following table shows key material flows during the months of July, August, and September including the fiscal year to date (FY YTD), and the same calendar month in the two prior fiscal years. As of July 1, 2014 the Shady Grove Processing and Transfer Station began soil screening operations to increase rubble and soil recycling. (County Fiscal Year 2016 began July 1, 2015.)

<b>FACILITY</b>	<b>Jul FY16</b>	<b>FY16 YTD</b>	<b>Jul FY15</b>	<b>Jul FY14</b>
Materials Recovery Facility <sup>(1)</sup>	6,314 tons	6,314 tons	6,478 tons	6,391 tons
Brunswick Landfill Facility <sup>(2)</sup>	0 ton	0 ton	0 ton	0 ton
Resource Recovery Facility <sup>(3)</sup>	50,245 tons	50,245 tons	55,874 tons	53,577 tons
Yard Trim Compost Facility	4,182 tons	4,182 tons	4,665 tons	4,764 tons
Honeygo Run Reclamation <sup>(4)</sup>	470 tons	470 tons	1,454 tons	3,764 tons
Other Rubble and Soil Recycling <sup>(5)</sup>	8,460 tons	8,460 tons	3,291 tons	0 ton
Ash Recycling (Old Dominion LF) <sup>(6)</sup>	14,808 tons	14,808 tons	16,851 tons	17,466 tons

<b>FACILITY</b>	<b>Aug FY16</b>	<b>FY16 YTD</b>	<b>Aug FY15</b>	<b>Aug FY14</b>
Materials Recovery Facility <sup>(1)</sup>	5,478 tons	11,792 tons	5,554 tons	5,888 tons
Brunswick Landfill Facility <sup>(2)</sup>	0 ton	0 ton	0 ton	0 ton
Resource Recovery Facility <sup>(3)</sup>	55,943 tons	106,188 tons	53,387 tons	50,860 tons
Yard Trim Compost Facility	3,340 tons	7,522 tons	3,504 tons	4,017 tons
Honeygo Run Reclamation <sup>(4)</sup>	632 tons	1,102 tons	678 tons	4,671 tons
Other Rubble and Soil Recycling <sup>(5)</sup>	6,936 tons	15,396 tons	4,489 tons	0 ton
Ash Recycling (Old Dominion LF) <sup>(6)</sup>	15,733 tons	30,541 tons	16,653 tons	16,842 tons

(1) MRF tons reported as outgoing.

(2) Refers to waste sent to the landfill for disposal (ash residue and nonprocessible waste). It does not include rubble and bulk natural wood waste that is recycled.

(3) RRF tonnage refers to tons burned (processed). Waste shipped from the Transfer Station but not burned is in the pit and is not included in the tonnage presented here.

(4) Non-processible waste sent to be sorted for recycling and landfilled.

(5) As of July 1, 2014, the Shady Grove processing Facility and Transfer Station began soil screening operations to increase rubble and soil recycling.

(6) Ash sent to Old Dominion Landfill for internal roads within working landfill cells and alternate daily cover.

FACILITY	Sep FY16	FY16 YTD	Sep FY15	Sep FY14
Materials Recovery Facility <sup>(1)</sup>	6,178 tons	17,970 tons	6,240 tons	5,974 tons
Brunswick Landfill Facility <sup>(2)</sup>	0 ton	0 ton	0 ton	0 ton
Resource Recovery Facility <sup>(3)</sup>	50,617 tons	156,805 tons	50,754 tons	47,603 tons
Yard Trim Compost Facility	2,229 tons	9,751 tons	4,187 tons	3,409 tons
Honeygo Run Reclamation <sup>(4)</sup>	737 tons	1,839 tons	206 tons	3,528 tons
Other Rubble and Soil Recycling <sup>(5)</sup>	5,693 tons	21,089 tons	3,457 tons	0 ton
Ash Recycling (Old Dominion LF) <sup>(6)</sup>	14,581 tons	45,122 tons	14,252 tons	12,563 tons

*(1) MRF tons reported as outgoing.*

*(2) Refers to waste sent to the landfill for disposal (ash residue and nonprocessible waste). It does not include rubble and bulk natural wood waste that is recycled.*

*(3) RRF tonnage refers to tons burned (processed). Waste shipped from the Transfer Station but not burned is in the pit and is not included in the tonnage presented here.*

*(4) Non-processible waste sent to be sorted for recycling and landfilled.*

*(5) As of July 1, 2014, the Shady Grove processing Facility and Transfer Station began soil screening operations to increase rubble and soil recycling.*

*(6) Ash sent to Old Dominion Landfill for internal roads within working landfill cells and alternate daily cover.*

During July, August and September program staff:

- Researched properties and entered billing changes into the database;
- Prepared monthly house counts for collection contractors;
- Processed vacancy refunds payable in July, August and September;
- Updated Access™ databases and Excel™ spreadsheets for monthly Refuse and Recycling Collection contractor reports;
- Continued routine research and correction of solid waste fee abnormalities as they emerge in the property tax database;
- Generated Hauler/Collector Credit Account invoices for July, August and September 2015 totaling \$3,998,604.28 (a decrease of \$69,952.40 below the same quarter in 2014);
- Updated the Aging Report (30-day average arrearage was less than \$15,000 per month for the quarter);
- Reconciled July, August and September 2015 tons to monies posted in ERP, as well as to the total dollars charged in Paradigm; and
- Completed the year-end closing processes for OMB and County Finance.

## **CITIZEN COMMITTEES**

**Dickerson Area Facilities Implementation Group (DAFIG)** – DAFIG met on Tuesday, September 15, 2015. Topics discussed included the following: Ambient Air Monitoring Report, Health Risk Assessment, Farm Lease update , DEP Complaint Report, SWAC and Facilities Update. There was no quorum. The next quarterly DAFIG meeting will be held on Tuesday, December 9, 2015.

### **Solid Waste Advisory Committee (SWAC)**

July – No meeting. Summer break.

August – No meeting. Summer break.

September – Recycling committee met to review refuse and recycling collection data to compare recycling participation in Subdistrict A vs. Subdistrict B. Planning Committee presented updated CY15 calendar. Meeting day and time have been changed to the first Wednesday of each month at 5:30 p.m. (except July, August, December).

## **COLLECTIONS**

**Resident Missed Collection Complaints:** These are calls from residents contacting MC311 one or two days after their collection day informing us that their solid waste was not collected.

July 2015	82
July 2014	56
Difference	+26

August 2015	64
August 2014	40
Difference	+24

September 2015	45
September 2014	41
Difference	+4

## **Resident Service Requests:**

### *July 2015*

22 gallon bin pick-up	1,042
22 gallon bin request	3,514
Bulk trash requests	2,551
Cart pick-up	22
Cart repair	493
65 gallon cart	580
35 gallon cart	13
Field check	278
Literature	333
Property damage/missing	32
Same day	259
Scrap Metal request	2,207

### *August 2015*

22 gallon bin pick-up	567
22 gallon bin request	1,914
Bulk trash requests	2,377
Cart pick-up	16
Cart repair	313
65 gallon cart	344
35 gallon cart	20
Field check	249
Literature	222
Property damage/missing	17
Same day	232
Scrap Metal request	2,069

### *September 2015*

22 gallon bin pick-up	505
22 gallon bin request	1,662
Bulk trash requests	2,080
Cart pick-up	18
Cart repair	276
65 gallon cart	292
35 gallon cart	23
Field check	199
Literature	175
Property damage/missing	14
Same day	206
Scrap Metal request	1,671

## **Outreach:**

### Survey Cards:

The Public Service Workers distributed survey cards while performing recycling container delivery/pick-ups or repairs. Figures in tables are percentages.

In **July**, 502 cards were dropped off with a return rate of 11%.

	Excellent	Good	Average	Fair	Poor
Service Request Fulfillment	92%	6%	1%	0%	1%
Service Request Fulfillment	79%	16%	2%	2%	1%

In **August**, 696 cards were dropped off with a return rate of 14%.

	Excellent	Good	Average	Fair	Poor
Service Request Fulfillment	87%	10%	2%	1%	0%
Service Request Fulfillment	76%	22%	0%	1%	1%

In **September**, 847 cards were dropped off with a return rate of 11%.

	Excellent	Good	Average	Fair	Poor
Service Request Fulfillment	95%	5%	0%	0%	0%
County Provided Collection Services	81%	18%	1%	0%	0%

## **Collection Section Enforcement Actions:**

### *July:*

- Citations: One (1) Citation was issued.
  - Collecting without a valid collector's tag/sticker 48-20-a.
- Notices of Violation: Three (3) Notices of Violation were issued.
  - Collect and/or transport solid waste within the county without a valid collector's tag attached to the vehicle 48-20-a.
  - Leaving vehicle running and unattended 48-23.
  - Leaving vehicle running and unattended 48-23.

*August:*

- Citations: Two (2) Citations were issued.
  - Did deposit solid waste upon a public highway 48-11.
  - Did collect solid waste before 7:00 a.m. less than 500 feet from an occupied residential structure 48-21-b.
- Notices of Violation: There were no Notice of Violations issued.

*September:*

- Citations: One (1) Citation was issued.
  - Collect and/or transport solid waste within the county without a valid collector's tag attached to the vehicle 48-20-a.
- Notices of Violation: There were no Notice of Violations issued.

**Website:**

Solid Waste Services Website

Metric	July 2015	August 2015	September 2015
Unique Visitors	25,718	20,983	19,666
Page Loads	132,004	107,676	98,242

Email List Memberships

Topic	Subscribers (new this month)		
	July 2015	August 2015	September 2015
Holiday Reminder	26,843 (3)	26,790 (0)	26,640 (2)
Holiday Reminder (by route)	2,938 (194)	3,023 (92)	3,183 (173)
HHW Announcements	12,858 (81)	12,910 (94)	12,964 (108)
Facility Updates	7,075 (55)	7,128 (78)	7,169 (77)
Electronics recycling	10,753 (100)	10,819 (97)	10,896 (125)
Expanded Polystyrene Ban news and updates			98 (98)
Go Green	5,019 (60)	5,066 (66)	5,115 (78)
Civic Loop	4,370 (10)	4,340 (9)	4,342 (19)
SORRT Newsletter	3,614 (9)	3,599 (9)	3,599 (16)
TRRAC	2,158 (10)	2,130 (8)	2,140 (18)
Quarterly Report	2,733 (10)	2,732 (12)	2,740 (19)
Paper Shredding Events	8,599 (137)	8,408 (128)	8,736 (81)
Recycling Volunteers	346 (0)	345 (0)	345 (0)
<b>Total Subscriptions</b>	<b>87,306 (669)</b>	<b>87,590 (593)</b>	<b>87,967 (814)</b>

Most Popular Web Pages

July 2015	August 2015	September 2015
1. Drop-off hours and events	Drop-off hours and events	Drop-off hours and events
2. Web Store – home page	Transfer Station – home page	Transfer Station – home page
3. Transfer Station – home page	How do I...	Web Store – home page
4. How do I...	Web Store – home page	Recycling, Trash, and Yard Trim programs – home
5. Recycling, Trash, and Yard Trim Programs – home	Recycling, Trash, and Yard Trim Programs – home	How do I...
6. DSWS home page	Bulk trash	DSWS home page
7. Web Store – Single-family recycling containers	DSWS home page	Bulk trash
8. Bulk trash	Web Store – Single-family recycling containers	Web Store – Single-family recycling containers
9. Holidays	Solid Waste Facilities - home	Holidays
10. 22-gallon blue bin	Scrap metal pickups	Scrap metal pickups

## **ADDITIONAL RECYCLING**

Product Recycled	Jul 2015	FY16 YTD	Jul FY15	Jul FY14
TV's and PC's	166 tons	166 tons	167 tons	199 tons
Propane Tanks	2 tons	2 tons	2 tons	2 tons
Textiles	13 tons	13 tons	14 tons	12 tons
Construction Materials (Don't Dump – Donate)	4 tons	4 tons	3 tons	2 tons
Vehicle Batteries	9 tons	9 tons	9 tons	11 tons
Scrap Metal	622 tons	622 tons	557 tons	458 tons

Product Recycled	August 2015	FY16 YTD	August FY15	August FY14
TV's and PC's	180 tons	346 tons	177 tons	163 tons
Propane Tanks	2 tons	4 tons	3 tons	2 tons
Textiles	5 tons	18 tons	11 tons	12 tons
Construction Materials (Don't Dump – Donate)	2 tons	6 tons	0 ton	3 tons
Vehicle Batteries	20 tons	29 tons	7 tons	8 tons
Scrap Metal	501 tons	1,123 tons	391 tons	510 tons

Product Recycled	September 2015	FY16 YTD	September FY15	September FY14
TV's and PC's	157 tons	503 tons	192 tons	141 tons
Propane Tanks	3 tons	7 tons	1 ton	2 tons
Textiles	9 tons	27 tons	10 tons	7 tons
Construction Materials (Don't Dump – Donate)	0 ton	6 tons	2 tons	2 tons
Vehicle Batteries	7 tons	36 tons	10 tons	7 tons
Scrap Metal	550 tons	1,673 tons	457 tons	394 tons

## **HAZARDOUS WASTE PROGRAMS**

**Household Hazardous Waste (HHW) Collection** – There were a total of 24,848 patrons to the program in the first fiscal quarter (July, August, September). During normal business hours we had 23,853 patrons; after 5:00 p.m., we had 995 patrons.

**Small Quantity Generator/ECOWISE Program** – There were 47 ECOWISE participants in the first quarter that discarded 4.34 tons of business related hazardous materials during the quarter.

## **WASTE REDUCTION**

**Bicycle Recycling** – “Bikes for the World” removed 2.25 tons of bikes in the first fiscal quarter for restoration and shipment to countries worldwide.

**Paint Reduction** – The free paint giveaway program through the County paint store reuse program resulted in 209 gallons of latex paint being given to County residents, and 58.71 tons of latex paint given to nonprofit organizations. Paint that does not have the ability to be reused or donated is solidified and further processed which resulted in 8,925 gallons of paint be processed for proper disposal.

**Straight Vegetable Oil (SVO) Recycling** – The Transfer Station has a vendor that accepts Waste Vegetable Oil (WVO) for the sole purpose of bio-diesel production; in the first fiscal quarter, 4 tons of WVO were shipped out for processing into biodiesel.

## **AIR PERMITS AND ENVIRONMENTAL PROGRAMS**

**Resource Recovery Facility (RRF): CEMS Tracking of RRF Emissions** – There was no exceedence of air permit emission limits during the quarter.

**TES Contract (Weather Station)** – All of the instrumentation worked normally this quarter. Data recovery for all parameters was 100 percent. Precipitation for the month of July was 2.22 inches; August was 2.33 inches and September 5.67 inches.

## **WASTE REDUCTION AND RECYCLING**

**Public Education and Outreach** – DEP/DSWS staff and Recycling Program Volunteers participated in a total of 20 community education and outreach events and activities between July 1 and September 30, 2015, reaching an estimated total audience of 12,555 people. The major event this quarter was the annual Montgomery County Agricultural Fair, held August 14-22, 2015. Sixty (60) recycling volunteers, some of whom volunteered during multiple shifts, contributed almost 375 hours of their time alongside DEP/DSWS staff and answered many questions from residents and provided waste reduction and recycling information to 9,346 people who visited the DSWS exhibition booth. Also this quarter, DEP/DSWS held the first of three Confidential Paper Shredding/Recycling and Clothing/Household Item Donation Collection Events for the fall

season. The first event occurred on Saturday, September 12<sup>th</sup> at Walter Johnson High School. A total of 657 participants attended the event and almost 12 tons of paper was collected for shredding and recycling. In addition, one-half of a box truck was filled with donated reusable clothing/household items for reuse. The next shredding and recycling events will be held on October 4<sup>th</sup> at Kennedy High School in Silver Spring and November 14<sup>th</sup> at Northwest High School in Germantown. An educational postcard self-mailer was produced and mailed to all single-family households receiving County-provided recycling collection services in mid-July. The postcard mailer highlighted examples of materials that can and should be recycled and the proper manner in which recyclable materials should be set out for recycling collection. During the summer, DEP/DSWS began preparations to develop educational materials and resources for businesses and consumers about the implementation of Council Bill 41-14: a ban on the use and sale of expanded polystyrene food service ware and loose fill packing materials. This effort included researching and developing a comprehensive list of vendors that supply either recyclable or compostable alternative packaging. This information has been posted to the DEP/DSWS website. Information pertaining to the ban was presented to the Recycling Oversight Committee on September 22<sup>nd</sup>, a group of representatives from local, state and federal government agencies in the County. A comprehensive outreach plan is being developed and will commence during the fall.

**On-Site Composting and Waste Reduction Activities** – A total of 876 backyard compost bins were distributed between July 1, 2015 and September 30, 2015 to encourage residents to compost their leaves and grass clippings on-site in a continuing effort to reduce the amount of yard trim materials that require processing by the county. Staff and recycling program volunteers distributed compost bins during seven (7) events this quarter which included the following: Master Gardener Grow It! Eat It!, Montgomery County Agricultural Fair, Damascus Community Fair, Mt. Jezreel Baptist Church Community Day, St. Rose of Lima Church Festival, and the Olney Farmers Market in July and September. In the month of July, DSWS expanded the number of compost bin distribution sites by partnering with Habitat for Humanity Restore in Silver Spring. DSWS now has 20 compost bin distribution sites throughout the County. Staff contacted all compost bin distribution sites regularly to ensure that each site has an adequate supply of compost bins for residents to pick up in preparation for the start of the fall season. Continued efforts are being made to schedule fall composting demonstrations workshops and volunteer training sessions.

**Recycling Investigations Unit** – Since the unit was established in 2005, 64,744 site visits and 6,319 formal investigations have been conducted. For the period from July 1, 2015 through September 30, 2015, 143 NOVs were issued to businesses and multi-family properties for infringements against the recycling regulations and Chapter 48. A total of 26 citations were issued to businesses, multi-family properties and recycling/refuse collection companies for the following reasons: fifteen (15) citations issued to businesses for failure to recycle required recyclable materials; two (2) citations issued to businesses for failure to provide containers for required recyclable materials; three (3) citations issued

to businesses and three (3) citations issued to multi-family properties for not maintaining the premises by permitting solid waste to be stored outside of approved containers; one (1) citation issued to a multi-family property for failure to store solid waste in a vermin-proof and water-proof container equipped with a tight-fitting lid; one (1) citation issued to a business for failure to provide and maintain an approved container for storage of solid waste; and one (1) citation issued to a collector for failure to collect and deliver to a recycling facility recyclable materials that have been source separated from the solid waste stream.

**Commercial Recycling and Waste** – Between July 1, 2015 and September 30, 2015, SORRT Program staff conducted 2,801 site visits to businesses to check on the status of their recycling programs providing outreach, education and technical assistance. During this same period, staff resolved eight (8) complaints, participated in 25 educational events reaching 1,636 people, distributed 915 desk-side recycling bins and 167 “slim jim” recycling containers to businesses to help set-up and/or improve existing recycling programs, and responded to 163 requests for information ranging from educational materials to presentations for property managers, tenants, and employees. Staff completed field verification of all 615 Annual Business Recycling and Waste Reduction Reports submitted for calendar year 2014. Approval notifications, including the property’s recycling rate are being emailed to all properties that filed annual recycling reports for CY2014.

**Multi-Family Recycling and Waste Reduction** – Between July 1, 2015 and September 30, 2015, TRRAC Program staff conducted 996 on-site visits to multi-family properties to monitor the status and progress of their recycling programs and to recommend on-site recycling program improvements. Staff participated in 15 multi-family property educational events, reaching 897 people. These events included community recycling displays and several resident recycling presentations, staff trainings, resident board meetings, and lobby events. Staff also responded to 81 requests for information; resolved seven complaints; and distributed 3,308 baby blue (6-gallon) multi-family recycling bins, 212 Slim Jim (23-gallon) recycling containers, 42 WasteWatcher XL (32-gallon) recycling containers, 3 Brute (44-gallon) recycling containers, and 11 Glutton (55-gallon) recycling containers to multi-family properties to increase available recycling capacity. Field verification of the 668 Annual Multi-Family Recycling and Waste Reduction Reports received for calendar 2014 was completed and all reports were finalized and approved by mid-July. The spring (June 2015) and summer (August 2015) issues of the TRRAC Newsletter were published and an announcement (with the link to the newsletter PDFs) was emailed to 2,141 email addresses registered on the multi-family newsletter listserv.

**Mixed Paper Recycling** – Existing educational materials were distributed to residents at several events, including the Montgomery County Agricultural Fair. DSWS created a display at the Fair to showcase the acceptable methods to set out mixed paper for recycling (mixed paper wheeled cart, bag, bundle, or box). Larger quantities of materials were also provided to homeowner associations and civic groups for their use and distribution.

**Volunteer Activities** – A total of 104 Recycling Program Volunteers, some of them participating in multiple events, contributed almost 542 hours of their time to support recycling activities from July 1, 2015 through September 30, 2015. One (1) volunteer provided over 38 hours of office assistance which included filing and counting and bundling of educational materials for distribution at outreach events. Sixty (60) recycling volunteers, some of whom volunteered during multiple shifts, contributed almost 375 hours of time during the 9-day Montgomery County Agricultural Fair. In preparation for the Fair, 13 volunteers collectively provided 36 hours of service assisting with three (3) special projects to prepare “reuse” craft activity supplies for use during the Fair. During this quarter, 17 volunteers participated in ten (10) community outreach events and provided 70 hours of direct service to provide waste reduction, reuse, recycling and composting information to residents. On September 12<sup>th</sup>, seven (7) volunteers provided 20 hours of service during the DSWS paper shredding/recycling and clothing/household item reuse donation collection event at Walter Johnson High School. Four (4) neighborhood outreach Block Captains provided over three (3) hours of their time to provide recycling information to 329 residents in their neighborhoods. Volunteer recruitment efforts during this quarter included attending the Gaithersburg-Germantown Chamber of Commerce Annual Non-Profit Showcase as well as three (3) volunteer fairs hosted at each of the three Montgomery College campuses (Germantown, Takoma Park/Silver Spring, and Rockville). The recycling volunteer program recruited nine (9) new volunteers, 34 new applicants and 277 prospect volunteers during the quarter. One (1) volunteer orientation/recycling training session was held for new volunteers in preparation for the County Fair. Eight (8) new volunteers and one (1) returning volunteer attended the session and received information about the County's recycling and solid waste programs. Three (3) new volunteer orientation sessions are scheduled throughout the fall. Additionally, a volunteer training session focusing on backyard composting of yard trim materials is scheduled for November 5, 2015. The fall edition of the Recycleletter is being drafted and will be emailed to all volunteers in October. As of September 30, 2015, there are 296 active recycling program volunteers.

## **PILOT PROGRAMS**

**Cooperative Collection/Alternative Collection** – The SORRT Program continued to monitor all three Cooperative Collection Projects in Silver Spring to ensure that the participants are recycling properly.

**EOB Cafeteria Food Scrap Recycling Model Project** – DSWS continued to monitor the model food scrap recycling collection project for the EOB cafeteria. During the course of the project to-date (November 1, 2011 – August 31, 2015) in which pre-consumer food scraps are separated for recycling collection, a total of 72.8 tons of food waste has been collected and recycled. DSWS continues to monitor the collection area daily and checks for feedback from cafeteria staff on a regular basis.

## **FACILITY ACTIVITIES**

**Resource Recovery Facility (RRF)** – The RRF processed a total of 156,805 tons for the quarter, or an average of 1,704 tons per day. During this time, 11 tours of the plant were given. The plant exported 88,662,000 kilowatt-hours to the power grid. About 2,872 tons of ferrous material was recovered from the ash and recycled. During the quarter, Unit #1 came down due to an internal tube leak; after which, a leak developed in a superheater tube, and an external tube leak which was also followed by a superheater tube leak. Unit #2 came down for a scheduled minor outage. During the outage, corrosion was discovered on the structural support for the scrubber outlet duct which was repaired. The unit also came down to replace the over fire air fan shaft and again to make repairs to the sled of an ash discharger. Unit #3 came down for a tube leak, to repair the under fire air fan motor, and again to clear a plug that developed in the scrubber outlet duct. The later issue lead to the discovery, prior to bringing the unit back online, of a superheater tube leak that developed while the unit was taken down. Also during the quarter, stack testing was performed. All parameters were within permit limits and a report was sent to MDE.

**Materials Recovery Facility (MRF)** – During the first quarter, the following items were addressed: three (3) conveyor belts were replaced due to wear, three (3) pulleys and ten (10) sets of bearings were replaced. The sprockets, rollers, head pulleys, tail pulleys, and tail guards were replaced on nine (9) additional conveyors; holes attributable to wear on the sides and bottoms of material chutes were repaired; seven (7) conveyor lacings were replaced, and we completed the rebuilding of our two main material feed conveyors. To help with the tracking of our conveyor belts and to help reduce the dropping of materials, side skirting and rubber linings were replaced on two (2) conveyors; two (2) Trolley wheels were replaced on the Trommel; the safety door and baling mechanisms were repaired on baler #2; seven (7) wheels were replaced and rails straightened on roll off boxes; one (1) gear box was replaced due to wear; four (4) chute systems were relined; and general repair and maintenance was performed on both balers and hoppers.

**Oaks Landfill – Power Plant Update** - The 2.4 Megawatt landfill gas-to-energy (LFGE) facility was operating well until a major maintenance issue on August 28, 2015. The new LFGE Operation & Maintenance Contractor, CB&I, started operations at Oaks on July 1, 2015. On the morning of Friday, August 28<sup>th</sup>, the 1.6 MW Caterpillar engine 3520 generator set, the larger of the two generator sets, at the Oaks Landfill Gas-to-Electricity

Project failed. The back-up flare system will manage that portion of the gas until the CAT is repaired.

Alban CAT, the local manufacturer representative, investigated the failure. It was determined that one of the connections was loose and caused excessive heat, which in turn caused the connection to fail and multiple phase to phase to ground faults occurred. Projected repairs are expensive and will require the removal of the generator and transportation to Alban CAT. Alban CAT will disassemble the generator, clean and test all of the windings and then perform repairs as required.

When the generator is removed and sent to Alban for inspection/repair, CB&I will also perform top-end maintenance on the Engine and do the required work on the front & rear drives (i.e. addressing an existing oil leak not related to this generator failure).

Groundwater Quality Update - SCS Engineers is doing a two-year groundwater monitoring evaluation to assess whether an expansion of the gas collection system outside of the landfill footprint to enhance collection of any fugitive gases is helping to reduce volatile organic compounds (VOCs) in groundwater. The County sends the semi-annual groundwater monitoring data to SCS for evaluation purposes. The SCS effort is related to a Nature and Extent Investigation of historically low level groundwater contamination in the northwest sector of the Oaks Landfill property that may be partially related to gas migration and is in addition to the routine post-closure monitoring and reporting done by DEP.

As part of the data analysis, SCS concluded that the supplementary soil gas extraction wells and groundwater monitoring wells installed in August 2014 to address gas migration beyond the fill area are functioning well. At the beginning of the first quarter, two sampling events were conducted. A third groundwater sampling event was conducted in April 2015. SCS Engineers' analysis of the gas monitoring data indicated that there was a significant decline in methane production in the soil gas wells between November 2014 and January 2015. This decline is an indication that, through a combination of the addition of the new extraction wells and the operation of the existing LFG collection system, increased control of landfill gas beyond the landfill footprint has been achieved.

SCS Engineers also completed the analysis of groundwater data for the samples collected in February and April of 2015. The analysis report indicated that no statistically significant downward or upward trends were identified for the COCs (Contaminants of Concern) in delineation wells NES-1S and NES-2. Therefore, no conclusions can be drawn at this time with regards to the effectiveness of the soil gas extraction system on addressing the affected groundwater. SCS Engineers recommended that the County continue to conduct quarterly monitoring for the VOCs at monitoring wells OB06, OB22, OB23 and OB24 (in accordance with the NEI Alternative Approach) and NES-1S and NES-2 (as recommended by SCS).

DEP completed the gas sampling around the landfill for the third (calendar) quarter gas monitoring report in September and no exceedances were noted.

The expanded oil and grit receiving area is functioning smoothly. The quarterly Periodic Compliance Report was submitted in a timely manner to WSSC.

In September, 2015 DSWS performed the quarterly inspection of stormwater outfalls at the Oaks Landfill. There were no non-stormwater discharges observed at any of the outfall locations.

In May 2015, the Department of General Services (DGS) requested DEP's support to help develop a solar power facility at the top of Oaks landfill. The solar facility will generate 4 MW and cover approximately 20 acres of the 180-acre landfill cap. The entire landfill property consists of approximately 550 acres. Installation of the solar facility should only take three to four days once all approvals are in place and materials have been delivered to the site. DEP and DGS are coordinating the design requirements with the Maryland Department of the Environment (MDE) to assure that a ballast system will be used to secure the panels without requiring any excavation. This will avoid any potential damage to the landfill cap. Stormwater management issues will also be addressed. MDE has been supportive of these types of projects in other parts of the state.

In accordance with an existing 1983 agreement with the community that addresses post-closure land uses, DGS and DEP wanted to meet with the community to discuss how this proposed land use is consistent with the intent of the existing agreement. A community meeting was held Tuesday, September 15<sup>th</sup>, at Laytonsville Elementary School, 21401 Laytonsville Road, Gaithersburg, MD, from 7 p.m. to 9 p.m. DEP prepared and mailed 170 meeting notice letters to community members who live adjacent to the landfill. The letter was also sent to the original signatories (or their successors) of the agreement. On September 15<sup>th</sup>, staff from DGS and DEP convened for the Community meeting. Four (4) community members were in attendance and did not voice any opposition toward the solar project proposed on the Oaks Landfill. Attendees were in support of solar (e.g. several had solar on their homes), and were interested and glad to hear of the efforts the County is taking to deploy more solar. Other comments included interest in the renewable energy tax credit (by the County) and concerns about Pepco regarding interconnection and net metering. The project, after clearing any remaining hurdles and MDE approvals, will start construction activities in March 2016.

**Gude Landfill** – The 0.8 MW Megawatt landfill gas-to-energy (LFGE) facility continues to operate. The new LFGE Operation & Maintenance Contractor CB&I started operations at Gude Landfill on July 1, 2015.

The Maryland Department of the Environment (MDE) approved the temporary piezometer installation plan for the Gude Landfill on July 31, 2015. This installation is part of the waste evaluation component of the revised Assessment of Corrective Measures (ACM)

report, required by MDE. The plan outlined the installation and development of six temporary piezometers within the landfill's waste footprint. DEP's consultant, EA, started drilling and development work on September 15, 2015 and completed the work on October 6, 2015. Two (2) of the six (6) proposed borings could not be completed due to safety concerns associated with high methane levels. The borings were offset in an attempt to drill them in nearby areas with lower methane concentrations, but these also had methane concentrations above the lower explosive limit (LEL). Fortunately, four (4) of the borings were successful and provided enough data to map the base of the landfill and the groundwater elevations. Taking advantage of the mobilization, EA also redeveloped eight (8) existing monitoring wells with the goal of reducing suspended solids that may adversely affect analyses for metals. In the past, a few samples had indicated metals concentrations slightly above regulatory limits.

The methane gas monitoring wells on the northwest boundary of the Gude Landfill adjacent to the gas line right-of-way and the Derwood Station community have been largely in compliance with Maryland Department of the Environment (MDE) standards for gas control (i.e., less than 5 percent methane by volume in wells at the property line). There have been continued exceedances with Well #26S and Well #28S near the pond off of the 600 East Gude Drive entrance, and the operations contractor, CB&I is preparing plans to mitigate exceedances issues. Gas monitoring data is regularly provided to the Gude Landfill Concerned Citizens (GLCC) which includes current and historical results. The third quarter gas monitoring event conducted in September indicated two (2) exceedances in Well #26S and Well #28S.

The monthly meetings, upon request, between GLCC (i.e. the community) and DSWS will continue throughout the remediation process at the Landfill. Written updates are provided during months when there is insufficient new information to justify a meeting.

**Beantown Dump Project** – This project, which involves reducing the presence of methane gas at the former Beantown Dump located near the intersection of Gude Drive and Dover Road, is currently in a data analysis stage. After Phase I, Passive Venting Monitoring (PVM) well enhancements to reduce methane concentrations at the old dump site, DEP's consultant, ERM, is now analyzing the quarterly methane gas results to determine the effectiveness of the Phase I enhancements and to determine what the next phase of the project should entail to meet the remedial action objectives for this site.

Two of the quarterly monitoring data events (November 2014 and February 2015) indicated considerable improvements after Phase I PVM well enhancements. However, May 2015 and August 2015 monitoring reports indicated exceedances.

ERM completed the evaluation of the results and stated that average methane concentrations at the modified wells has continued to decrease. All of the wells, but most significantly the modified wells, have been improving at an increasing rate, indicating that the modifications are being effective. Modifications included the vertical

extension of the gas venting wells and the addition of passive turbines to increase the rate of gas flow from the wells.

**Solid Waste Transfer Station** – Covanta shipped 159,188 tons of processible waste via rail from the Transfer Station for the first quarter of FY16 compared to 160,363 for the same period last year.

The inbound radiation detectors had 23 total alarms this quarter – ten (10) alarms by vehicles whose loads were identified as containing low levels of medical isotopes with short half-lives in trash; six (6) alarms were from drivers who had undergone recent medical tests. The Public Unloading Facility radiation detectors had seven (7) alarms. All alarms involved drivers or passengers who had undergone recent medical tests and/or treatment involving radioactive isotopes and residual radiation.

**Transfer Station Enforcement** – Under Chapter 48 of the Montgomery County Code, a total of 438 enforcement actions were issued during the reporting period. The enforcement composition breakdown includes:

<b>Code Section</b>	<b>Description</b>	<b>Verbal</b>	<b>NOV</b>	<b>Citation</b>	<b>TOTAL</b>
48.00.05.03(d)	<i>Delivering of solid waste acceptable for recycling</i>	12	4	1	17
48-11	<i>Illegal dumping, dumping in another's container, dumping solid waste on a public right-of-way</i>	1	0	0	1
48-19(a)(1)	<i>Transporting Solid Waste without a valid Collectors/Hauler tag</i>	1	2	1	4
48-19(a)(3)	<i>Person cannot engage in business of collecting or transporting solid waste without obtaining a license</i>	1	2	4	7
48-19(a)(2)	<i>Transporting solid waste without a canvas or tarp covering the load tightly Commercial</i>	45	21	9	75
48-19(b)(1)	<i>Collector and/or Hauler must maintain an office in the County</i>	0	0	0	0
48-19(2a)(a)	<i>Improper or no tarps on resident vehicle</i>	238	12	3	253
48-20(a)	<i>Un-permitted Vehicle of a Licensed Company</i>	1	0	19	20
48-20(c)	<i>3" letters must be on vehicle on each side</i>	0	0	0	0
48-20(d)	<i>Unsafe Vehicle</i>	0	1	3	4
48-22	<i>Permit required for transporting trash from out of State into County</i>	0	1	2	3
48-24(c)	<i>Container Standards must be maintained</i>	0	0	0	0
48-48(a)	<i>Disposing of Solid Waste Acceptable for Recycling (Generators)</i>	0	8	46	54
	<b>TOTALS</b>	<b>299</b>	<b>51</b>	<b>88</b>	<b>438</b>

**Site 2 Landfill Properties** – DGS contractor began repairing numerous windows at the Chiswell house. The tenant in the Wasche Road house moved out. Real Estate section of DGS inspected the house, as did Solid Waste staff, and had the locks re-keyed. Lots of items were left behind that will need to be disposed of. The house is in need of some repairs and painting.

**Yard Trim Compost Facility** – The facility received 9,751 tons of material for composting this quarter; this compares with 11,856 tons of materials received during the same period last year. No material was diverted to back-up composting facilities this quarter. There were 8,835 cubic yards of bulk LeafGro™ shipped this quarter; compared with 12,397 cubic yards for the same period last year.

**Bagging Operation** – 71,750 bags of LeafGro™ were shipped to distributors this quarter. This compares with 61,050 bags shipped during the same period last year. (Each bag is 1.5 cubic feet weighing 45 lbs.)

## **OUT-OF-COUNTY HAUL**

**Old Dominion, Richmond, VA** – In the first quarter of FY16 approximately 45,122 tons of ash residue were transported to the Old Dominion Landfill for ash recycling and metal recovery. The Ash is screened into two grades for use as road base and alternate daily cover within the confines of the landfill owned by Republic Services. Metals are also removed from the ash both at the RRF and during the screening process at Old Dominion Landfill.

**Perry Hall Maryland** – Approximately 1,839 tons of asphalt, soil, concrete, and brick and block and other non-processibles were sent to the Honeygo Run Recycling site in Perry Hall, Maryland, for construction and demolition debris recycling or disposal for the first quarter of FY16.

**DOT Pad Recycling** – Since July, 2014, Covanta has been operating the DOT pad for construction and demolition recycling and including a soil screening operation. In the first quarter, 21,090 tons of concrete and dirt were processed and sent to vendors for recycling.

# GENERAL INFORMATION

## Important Telephone Numbers

General information on solid waste	311 or 240-777-0311
Customer Service	311 or 240-777-0311
Transfer Station	240-777-6560 (County Office) 301-916-3031 (Covanta) 301-330-2840 (MES)
Materials Recovery Facility	240-777-6591 (County Office) 301-417-1433 (MES)
Resource Recovery Facility	240-777-6494 (County Office) 301-916-3031 (Covanta)
Yard Trim Compost Facility	301-428-8185 (MES)
Internet for DSWS	<a href="http://www.montgomerycountymd.gov/solidwaste">www.montgomerycountymd.gov/solidwaste</a> <a href="http://www.montgomerycountymd.gov/recycling">www.montgomerycountymd.gov/recycling</a> <a href="http://www.montgomerycountymd.gov/hazardouswaste">www.montgomerycountymd.gov/hazardouswaste</a> <a href="http://www.montgomerycountymd.gov/useitagain">www.montgomerycountymd.gov/useitagain</a> <a href="http://www.montgomerycountymd.gov/yardtrim">www.montgomerycountymd.gov/yardtrim</a> <a href="http://www.montgomerycountymd.gov/veggieoil">www.montgomerycountymd.gov/veggieoil</a>

Note: All comments, questions, and suggestions on the contents of this report should be addressed to:

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Division of Solid Waste Services  
101 Monroe Street, 6th Floor  
Rockville, MD 20850  
Tel: 240-777-6459  
Fax: 240-777-6465  
Email: [serena.bell@montgomerycountymd.gov](mailto:serena.bell@montgomerycountymd.gov)

# SOLID WASTE FACTS IN A NUTSHELL

<b>TOPIC OR FACILITY</b>	
Latest Tonnage of Materials Recycled in Montgomery County	609,151 (CY13)
Latest Recycling and Waste Diversion Rate Reported in Montgomery County	60.18% (CY13)
Recycling Goal	70% by December 31, 2020
Resource Recovery Facility (RRF)	Permitted Capacity = 657,000 tons per calendar year (based on 5,500 BTU/lb waste)
Yard Trim Compost Facility	<p>Under the Sugarloaf Settlement Agreement, operations are limited to the receipt of 77,000 tons per fiscal year.</p> <p>In FY14, 69,110.25 tons of yard trim were received at the Dickerson Facility.</p>
# Residences receiving trash collection by County contractors	91,312
# Residences receiving collection of recyclables in blue bins and yard trim collection	214,957
Term of out-of-county waste transportation and disposal contract with Brunswick Waste Management Facility, Inc.	June 19, 1997 through June 30, 2017 including an approval option for a five-year renewal. (Service started October 20, 1997.)

## GLOSSARY OF ACRONYMS

ACM	Assessment of Corrective Measures Work Plan
BTU	British Thermal Unit
CEMS	Continuous Emissions Monitoring System
COC	Contaminants of Concern
DAFIG	Dickerson Area Facilities Implementation Group
DEP	Department of Environmental Protection
DSWS	Division of Solid Waste Services
EA	EA Engineering, Science, and Technology, Inc.
ERM	Environmental Resources Management
ERP	Enterprise Resource Planning
FY	Fiscal Year
GLCC	Gude Landfill Concerned Citizens
HHW	Household Hazardous Waste
kWh	Kilowatt-hours
LFGE	Landfill Gas-to-Energy
LOL	Lower Explosive Limit
MDE	Maryland Department of the Environment
MES	Maryland Environmental Services
M-NCPPC	Maryland-National Capital Park and Planning Commission
MRF	Materials Recovery Facility
MWh	Mega Watt hours
NOV	Notice of Violation
PVM	Passive Venting Monitoring
RRF	Resource Recovery Facility
SORRT	Smart Organizations Reduce and Recycle Tons
SWAC	Solid Waste Advisory Committee
SVO	Straight Vegetable Oil
TRRAC	Think Reduce and Recycle at Apartments and Condominiums
VOC	Volatile Organic Compounds

WSSC	Washington Suburban Sanitary Commission
WVO	Waste Vegetable Oil
YTD	Year-To-Date