



DEPARTMENT OF
**ENVIRONMENTAL
PROTECTION**



Montgomery County, Maryland

DIVISION OF SOLID WASTE SERVICES

QUARTERLY REPORT

OCTOBER, NOVEMBER, AND DECEMBER 2015

(2nd Quarter of FY16)



DSWS staff members, Recycling Volunteers and Rocco the Recycling Retriever participated in the County's annual Thanksgiving Day Parade in Silver Spring!

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OVERVIEW

Tonnage at a Glance

The following table shows key material flows during the months of October, November, and December 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.)

FACILITY	Oct FY16	FY16 YTD	Oct FY15	Oct FY14
Materials Recovery Facility ⁽¹⁾	5,872 tons	23,842 tons	6,274 tons	6,301 tons
Brunswick Landfill Facility ⁽²⁾	0 ton	0 ton	0 ton	0 ton
Resource Recovery Facility ⁽³⁾	49,864 tons	206,669 tons	49,361 tons	47,422 tons
Yard Trim Compost Facility	3,974 tons	13,725 tons	4,765 tons	4,186 tons
Honeygo Run Reclamation ⁽⁴⁾	416 tons	2,255 tons	293 tons	3,652 tons
Other Rubble and Soil Recycling ⁽⁵⁾	4,673 tons	25,762 tons	1,989 tons	0 ton
Ash Recycling (Old Dominion LF) ⁽⁶⁾	16,408 tons	61,530 tons	15,401 tons	13,390 tons

FACILITY	Nov FY16	FY16 YTD	Nov FY15	Nov FY14
Materials Recovery Facility ⁽¹⁾	6,042 tons	29,884 tons	5,749 tons	5,916 tons
Brunswick Landfill Facility ⁽²⁾	0 ton	0 ton	0 ton	0 ton
Resource Recovery Facility ⁽³⁾	50,760 tons	257,429 tons	47,431 tons	42,694 tons
Yard Trim Compost Facility	16,105 tons	29,830 tons	12,695 tons	15,443 tons
Honeygo Run Reclamation ⁽⁴⁾	475 tons	2,730 tons	58 tons	1,139 tons
Other Rubble and Soil Recycling ⁽⁵⁾	1,351 tons	27,113 tons	1,817 tons	0 ton
Ash Recycling (Old Dominion LF) ⁽⁶⁾	13,948 tons	75,478 tons	13,522 tons	12,687 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	Dec FY16	FY16 YTD	Dec FY15	Dec FY14
Materials Recovery Facility ⁽¹⁾	7,188 tons	37,072 tons	7,441 tons	7,123 tons
Brunswick Landfill Facility ⁽²⁾	0 ton	0 ton	0 ton	0 ton
Resource Recovery Facility ⁽³⁾	54,728 tons	312,157 tons	48,450 tons	45,901 tons
Yard Trim Compost Facility	14,404 tons	44,234 tons	15,116 tons	14,712 tons
Honeygo Run Reclamation ⁽⁴⁾	543 tons	3,273 tons	0 ton	662 tons
Other Rubble and Soil Recycling ⁽⁵⁾	851 tons	27,964 tons	1,635 tons	0 ton
Ash Recycling (Old Dominion LF) ⁽⁶⁾	15,039 tons	90,517 tons	13,922 tons	11,786 tons

(1) MRF tons reported as outgoing.

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(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.

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

During October, November, and December program staff:

- Researched properties and entered billing changes into the database;
- Prepared monthly house counts for collection contractors;
- Processed vacancy refunds payable in October, November, and December;
- **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 October, November, and December 2015 totaling \$4,119,337.00 (an increase of \$258,171.78 above the same quarter in 2014);
- Updated the Aging Report (30-day average arrearage was less than \$10,000 per month for the quarter);
- Reconciled October, November, and December 2015 tons to monies posted in ERP, as well as to the total dollars charged in Paradigm;
- Submitted the FY16 budget to County Council for their review; and
- Performed a review of prior-year encumbrance balances and remaining budget balances.

CITIZEN COMMITTEES

Dickerson Area Facilities Implementation Group (DAFIG) – DAFIG met on Tuesday, December 8, 2015. Topics discussed included the following: Ambient Air Monitoring Report, Health Risk Assessment, DEP Complaint Report, SWAC and Facilities Update. There was no quorum. The next quarterly DAFIG meeting will be held on Tuesday, March 8, 2016.

Solid Waste Advisory Committee (SWAC)

October – No meeting. Agenda rescheduled for November.

November – Section Chiefs presented an overview of their operations and activities.

December – No meeting. Holiday break.

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.

October 2015	82
October 2014	43
Difference	+39

November 2015	58
November 2014	35
Difference	+23

December 2015	73
December 2014	46
Difference	+27

Resident Service Requests:

October 2015

22 gallon bin pick-up	417
22 gallon bin request	1,380
Bulk trash requests	1,914
Cart pick-up	22
Cart repair	259
65 gallon cart	223
35 gallon cart	24
Field check	221
Literature	161
Property damage/missing	17
Same day	223
Scrap Metal request	1,562

November 2015

22 gallon bin pick-up	371
22 gallon bin request	1,285
Bulk trash requests	1,898
Cart pick-up	6
Cart repair	236
65 gallon cart	169
35 gallon cart	38
Field check	203
Literature	128
Property damage/missing	16
Same day	219
Scrap Metal request	1,418

December 2015

22 gallon bin pick-up	280
22 gallon bin request	1,074
Bulk trash requests	1,994
Cart pick-up	8
Cart repair	234
65 gallon cart	126
35 gallon cart	42
Field check	236
Literature	83
Property damage/missing	12
Same day	179
Scrap Metal request	1,539

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 October, 964 cards were dropped off with a return rate of 10%.

	Excellent	Good	Average	Fair	Poor
Service Request Fulfillment	84%	12%	2%	0%	2%
Service Request Fulfillment	75%	21%	4%	0%	0%

In November, 866 cards were dropped off with a return rate of 11%.

	Excellent	Good	Average	Fair	Poor
Service Request Fulfillment	95%	3%	0%	2%	0%
Service Request Fulfillment	82%	17%	1%	0%	0%

In December, 1,301 cards were dropped off with a return rate of 8%.

	Excellent	Good	Average	Fair	Poor
Service Request Fulfillment	92%	8%	0%	0%	0%
County Provided Collection Services	76%	19%	3%	2%	0%

Collection Section Enforcement Actions:

October:

- Citations: None issued.
- Notices of Violation: There were two (2) Notices of Violation issued.
 - Vehicle found to be in an unsafe, physical, mechanical or unsanitary condition 48-20-d.
 - Leaving vehicle running and unattended 48-23.

November:

- Citations: None issued.
- Notices of Violation: There was one (1) Notice of Violation issued.
 - Leaving vehicle running and unattended 48-23.

December:

- Citations: None issued.
- Notices of Violation: There was one (1) Notice of Violation issued.
 - Improper storage of solid waste 48-24-b.

Website:

Solid Waste Services Website

Metric	October 2015	November 2015	December 2015
Users	39,066	28,982	23,009
Sessions	51,097	54,629	50,398
Page Views	108,889	114,530	108,663

Email List Memberships

Topic	Subscribers (new this month)		
	October 2015	November 2015	December 2015
Holiday Reminder	26,551 (3)	26,445 (1)	26,330 (2)
Holiday Reminder (by route)	3,286 (112)	3,425 (151)	3,502 (99)
HHW Announcements	13,011 (86)	13,062 (97)	13,062 (25)
Facility Updates	7,208 (68)	7,245 (65)	7,245 (89)
Electronics recycling	10,958 (99)	11,016 (108)	11,100 (137)
Expanded Polystyrene Ban news and updates	113 (19)	134 (22)	150 (18)
Go Green	5,159 (60)	5,207 (67)	5,207 (16)
Civic Loop	4,324 (4)	4,316 (11)	4,291 (4)
SORRT Newsletter	3,547 (4)	3,524 (8)	3,511 (4)
TRRAC Newsletter	2,128 (5)	2,129 (9)	2,112 (7)
Quarterly Report	2,732 (6)	2,732 (14)	2,717 (10)
Paper Shredding Events	8,756 (53)	8,837 (108)	8,931 (127)
Recycling Volunteers – Active	349 (41)	349 (0)	160
Recycling Volunteers – Prospective	--	--	210
Learn about new web features	--	--	120
Total Subscriptions	88,122 (557)	88,421 (661)	88,507 (638)

Most Popular Web Pages

October 2015	November 2015	December 2015
1. Drop-off hours and events	Drop-off hours and events	Drop-off hours and events
2. Holidays	Holidays	Holidays
3. Recycling, Trash, and Yard Trim Programs – home	Recycling, Trash, and Yard Trim Programs – home	Recycling, Trash, and Yard Trim programs – home
4. DSWS home page	DSWS home page	How do I...
5. How do I...	How do I...	DSWS home page
6. Transfer Station – home page	Transfer Station – home page	Bulk trash
7. Bulk trash	Bulk trash	Transfer Station – home page
8. Web Store – home page	Web Store – home page	Web Store – Single-family recycling containers
9. Web Store – Single-family recycling containers	Collection Day Lookup	Web Store – home page
10. Paper shredding events	Web Store – Single-family recycling containers	Web Store – Single-family recycling containers

ADDITIONAL RECYCLING

Product Recycled	Oct FY16	FY16 YTD	Oct FY15	Oct FY14
TV's and PC's	106 tons	609 tons	164 tons	169 tons
Propane Tanks	2 tons	9 tons	3 tons	2 tons
Textiles	11 tons	38 tons	11 tons	11 tons
Construction Materials (Don't Dump – Donate)	0 ton	6 tons	0 ton	4 tons
Vehicle Batteries	6 tons	42 tons	7 tons	9 tons
Scrap Metal	451 tons	2,124 tons	431 tons	448 tons

Product Recycled	Nov FY16	FY16 YTD	Nov FY15	Nov FY14
TV's and PC's	133 tons	742 tons	148 tons	122 tons
Propane Tanks	2 tons	11 tons	2 tons	2 tons
Textiles	12 tons	50 tons	6 tons	11 tons
Construction Materials (Don't Dump – Donate)	1 ton	7 tons	0 ton	0 ton
Vehicle Batteries	12 tons	54 tons	8 tons	5 tons
Scrap Metal	432 tons	2,556 tons	350 tons	328 tons

Product Recycled	Dec FY16	FY16 YTD	Dec FY15	Dec FY14
TV's and PC's	124 tons	866 tons	164 tons	154 tons
Propane Tanks	2 tons	13 tons	2 tons	1 ton
Textiles	10 tons	60 tons	11 tons	11 tons
Construction Materials (Don't Dump – Donate)	3 tons	10 tons	1 ton	0 ton
Vehicle Batteries	4 tons	58 tons	7 tons	6 tons
Scrap Metal	475 tons	3,031 tons	368 tons	336 tons

HAZARDOUS WASTE PROGRAMS

Household Hazardous Waste (HHW) Collection – There were a total of 23,433 patrons to the program in the second fiscal quarter. During normal business hours we had 22,710 patrons; after 5:00 p.m., we had 723 patrons.

Small Quantity Generator/ECOWISE Program – There were 38 ECOWISE participants in the second quarter that discarded 3.89 tons of business related hazardous materials during the quarter.

WASTE REDUCTION

Bicycle Recycling – **“Bikes for the World” removed** 5.19 tons of bikes in the second fiscal quarter for restoration and shipment to countries worldwide.

Paint Reduction – The free paint giveaway program through the County paint store reuse program closed for the season during the second quarter, as such, no latex paint was given to County residents, although 112 tons of latex paint was given to nonprofit organizations. Paint that does not have the ability to be reused or donated is solidified and further processed. This resulted in the processing of 5,284 gallons of paint 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 second quarter, 7.14 tons of WVO was 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 October was 4.55 inches; November was 2.35 inches and December was 5.46 inches.

WASTE REDUCTION AND RECYCLING

Public Education and Outreach – DEP staff and Recycling Program Volunteers participated in a total of 17 community education and outreach events and activities between October 1, 2015 and December 31, 2015, reaching an estimated total audience of 4,731 people. During this quarter, DEP conducted the final two Confidential Paper Shredding/Recycling and Clothing/Household Item Donation Collection Events for the fall season. The second event occurred on Sunday, October 4, at John F. Kennedy High School. A total of 733 participants attended the event and over 11 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 third and final shredding and

recycling event for the fall season was held on November 14 at Northwest High School in Germantown. A total of 611 participants attended this event and over 12.5 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. Also during the fall, DEP developed 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 peanuts. This included the development of an informational fact sheet that was posted on the DSWS website and copies are being distributed at events and during on-site visits to businesses conducted by SORRT Program staff. In addition, DEP scheduled and conducted six (6) webinars between October 20 and November 23 to inform businesses about the ban on expanded polystyrene food service ware. A total of 67 people, representing a number of businesses and product vendors participated in the webinars. A recorded session of one webinar, along with the slide presentation is available on the DSWS website to provide information to business **representatives that were not able to participate in one of the "live" webinars.** During the quarter, DEP staff responded to twelve (12) telephone calls regarding the ban on expanded polystyrene food service products. Work began on creating an educational awareness campaign that will begin in early 2016. On December 3, staff provided a **presentation to the agricultural community on how farmers can help meet the County's** goal to reduce waste and recycle 70% by 2020. The presentation was hosted by the Montgomery County Food Council and there were an estimated 50 farmers in attendance.

On-Site Composting and Waste Reduction Activities – A total of 680 backyard compost bins were distributed between October 1, 2015 and December 31, 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. DSWS responded to seven (7) requests for information about backyard composting and grasscycling and fulfilled three (3) requests for educational materials such as refrigerator magnets and composting/grasscycling DVDs. DEP staff and recycling program volunteers distributed compost bins during at six (6) events this quarter which included the following: Olney Farmers Market, Go Green Series at Olney Library, Potomac Day, Good Earth Garden Market Family Day, and America Recycles Day at the Gaithersburg and Silver Spring locations of the Habitat for Humanity ReStore. To further expand backyard composting outreach and education efforts, staff set up a compost bin distribution table **during the Division's paper shredding/recycling and clothing/household item reuse** donation event on November 14 at Northwest High School and distributed 11 compost bins to residents. During this quarter, staff maintained contact with each of the 20 compost bin distribution sites to ensure that each site had an adequate supply of compost bins for residents to pick up. Staff completed 22 requests for compost bins to these distribution sites. Information about backyard composting and recycling of Christmas trees was included in the fall and winter editions of the DSWS Civic Loop recycling newsletter and the Recycletter for recycling volunteers.

Recycling Investigations Unit – Since the unit was established in 2005, 66,411 site visits and 6,459 formal investigations have been conducted. For the period from October 1, 2015 through December 31, 2015, 142 NOVs were issued to businesses and multi-family properties for infringements against the recycling regulations and Chapter 48. A total of 23 citations were issued to businesses, multi-family properties and recycling/refuse collection companies for the following reasons: sixteen (16) citations were issued to businesses for failure to recycle required recyclable materials; two (2) citations were issued to businesses for failure to properly maintain the premises by permitting solid waste to be stored outside of approved containers; one (1) citation was issued to a multi-family property for failure to provide containers for required recyclable materials; one (1) citation was 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 was issued to a business for failure to provide and maintain an approved container for storage of solid waste; one (1) citation was 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; and one (1) citation was issued to a collector for collecting solid wastes after 9:00 p.m. and before 7:00 a.m. less than 500 feet from an occupied residential structure.

Commercial Recycling and Waste – Staff of the SORRT Program conducted 2,712 site visits to businesses from October 1, 2015 through December 31, 2015. During this same period, staff resolved four (4) complaints, participated in 21 educational events reaching 2,288 people, distributed 1,203 desk-side (7-gallon) recycling bins and 64-gallon slim jim (23-gallon) recycling containers to businesses to help set-up and/or improve existing recycling programs. Staff also responded to 138 requests for information ranging from educational materials to presentations for property managers, tenants, and employees. On October 5, SORRT staff members participated in a Biotech Roundtable hosted by MedImmune. The roundtable gathered several biotech business representatives from the DC Metro area to identify common issues regarding disposal and recycling of certain types of waste generated by these businesses. The representatives agreed to hold a second meeting in 2016 to further explore some of the issues discussed. The SORRT Program hosted the quarterly Recycling Oversight Committee (ROC) meeting for representatives from local, State and Federal government agencies on December 1. The meetings seek to **share information pertaining to the County's business recycling requirements and discuss** experiences and ideas to help them improve their recycling efforts. Staff emailed notifications regarding the CY2015 Annual Business Recycling and Waste Reduction Report to 590 businesses and commercial properties, with only 46 copies of the report being sent via US Mail to businesses. Large-sized businesses are required to file their annual recycling report by February 1, 2016, and medium-sized businesses and selected small businesses, as well as property owners of multi-tenant commercial properties are required to file their reports by March 1, 2016. Webinars are scheduled for January 2016 to demonstrate how businesses can file their annual recycling report on-line.

Multi-Family Recycling and Waste Reduction – This quarter, TRRAC Program staff conducted 785 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 12 multi-family property educational events, reaching 420 people. These events included community recycling displays and several resident recycling presentations, staff trainings, resident board meetings, and lobby events. Staff also responded to 55 requests for information; resolved seven (7) complaints; and distributed 2,965 baby blue (6-gallon) multi-family recycling bins, 35 Slim Jim (23-gallon) recycling containers, 46 WasteWatcher XL (32-gallon) recycling containers, two (2) Brute (44-gallon) recycling containers, and 13 Glutton (55-gallon) recycling containers to multi-family properties to increase available recycling capacity. The fall (October 2015) and winter (December 2015) issues of the TRRAC Newsletter were published and an announcement (with the link to the newsletter PDFs) was emailed to 2,126 email addresses registered on the multi-family newsletter listserv. TRRAC staff and Recycling Program Volunteers distributed more than 2,400 bi-lingual **“Recycle More Now at Your Apartment or Condominium!” educational door hangers at three events.** The events were held on October 17 at The Blairs Properties in Silver Spring (Blair House, Blair East, Blair Plaza, and Blair Towns); on November 18 at Westwood Tower Apartments in Bethesda; and on December 19 at Windsor Court and Tower Apartments, Woodvale Apartments, and Knights Bridge I Apartments in Briggs Chaney/Burtonsville. An email notice was sent to 930 property managers (representing 677 multi-family properties) reminding them of the February 1 deadline for submitting their Multi-Family Annual Recycling and Waste Reduction Reports. The TRRAC Program conducted a webinar on December 17 to educate multi-family property managers about the on-line annual recycling report system. A total of ten (10) property and community managers participated in the webinar.

Mixed Paper Recycling – Existing educational materials were distributed to residents at several events. Larger quantities of materials were also provided to homeowner associations and civic groups for their use and distribution.

Volunteer Activities – A total of 65 Recycling Program Volunteers, some of them participating in multiple events, contributed almost 247 hours of their time to support recycling activities from October 1, 2015 through December 31, 2015. One volunteer provided over 44 hours of office assistance which included filing and counting and bundling of educational materials for distribution at outreach events. During this quarter, 14 volunteers participated in nine community outreach events and provided 53 hours of direct service to provide waste reduction, reuse, recycling and composting information to residents. A total of 13 volunteers contributed almost 58 hours of service during two DSWS paper shredding/recycling and clothing/household item reuse donation collection events (October 4 and November 14). Additionally, 17 volunteers contributed over 61 hours of service preparing for and participating in the Annual Montgomery County Silver Spring Thanksgiving Parade to promote the County’s goal to reduce waste and recycle 70% by 2020 and to encourage viewers to use alternative recyclable products in place of polystyrene food service ware and loose fill packaging items. Also during this quarter,

three neighborhood outreach Block Captains provided almost two hours of their time to provide recycling information to 5 residents in their neighborhoods. Fifteen recycling volunteers contributed 29 service hours to distribute informational door hangers about recycling at two multi-family properties in October and December. The recycling volunteer program recruited 12 new volunteers, two applicants, and 12 prospect volunteers during this quarter. Twelve new volunteers attended and received information about the **County's various recycling and solid waste programs during two new volunteer** orientation sessions held this quarter on October 31 and November 17. The next new volunteer orientation training is scheduled for Saturday, January 23, 2016. Staff also provided an additional training session focusing on backyard composting on November 5, 2015 with two existing volunteers attending. During this quarter, the fall and winter editions of the Recycleletter were emailed to all volunteers. There are 308 active recycling program volunteers as of December 31, 2015.

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 – DEP 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 – November 30, 2015) in which pre-consumer food scraps are separated for recycling collection, a total of 75 tons of food waste has been collected and recycled. DEP continues to monitor the collection area daily and checks for feedback from cafeteria management and staff on a regular basis.

FACILITY ACTIVITIES

Resource Recovery Facility (RRF) – The RRF processed a total of 155,352 tons for the quarter, or an average of 1,689 tons per day. During this time, ten tours of the plant were given. The plant exported 86,440,000 kilowatt-hours to the power grid. About 2,903 tons of ferrous material was recovered from the ash and recycled. During the quarter units came down for internal and external tube leaks and for scheduled outages. During the outages, Unit #1's structural support for the scrubber outlet duct was repaired to proactively prevent corrosion problems. Repairs were also made to Unit #1 scrubber to extend its life. Superheater hoppers were also repaired during outages to eliminate tramp air.

Materials Recovery Facility (MRF) – During the second quarter, the following items were addressed: nine conveyor belts were replaced due to wear; seven pulleys and 14 sets of bearings were replaced; the sprockets, rollers, head pulleys, tail pulleys, and tail guards were replaced on three additional conveyors; two gear boxes and one switch were replaced due to wear; and general repair and maintenance was performed on all processing equipment and rolling stock.

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, 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.

The repairs to the engine continued throughout the remainder of October, November and December. The initial install effort took longer than expected and they had to address and correct some electrical relay issues.

CB&I completed the Major Engine Overhaul Maintenance Top End overhaul (8000HR) completed approximately November 13. CB&I scheduled Nixon Energy to perform the 50K hour service on the Jenbacher engine at Oaks beginning on January 1 and continuing for approximately two weeks.

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.

CB&I completed the gas sampling around the landfill for the 3rd and 4th (calendar) quarter gas monitoring events in September and December and no exceedances were noted.

In December, DEP 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 the Oaks landfill. The solar facility will generate 4 MW and cover approximately 18 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.

A community meeting was held Tuesday, September 15, at Laytonsville Elementary School, 21401 Laytonsville Road, Gaithersburg, MD, from 7 p.m. to 9 p.m. 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.

MDE approved the temporary piezometer installation plan for the Gude Landfill on July 31. This installation is part of the waste evaluation component of the revised Assessment of Corrective Measures (ACM) report, required by MDE. The installation of four piezometers to assess the separation of waste from the groundwater table was completed on October 6. Updates on revised ACM due to MDE in February 2016:

- a. Metals Exceedances – DEP completed Fall 2015 sampling in August using a low-flow methodology for the second sampling event. Samples have been analyzed and data received. There were several Maximum Contaminant Level (MCL) exceedances for metals. The full report will be complete by the end of January 2016 and posted to the Gude Landfill Remediation website.
- b. Waste Depth – **DEP’s consultant drilled through the landfill in September 2015 to identify the bottom of the waste and the groundwater elevation.** Four borings were advanced through the waste and temporary piezometers were installed in those borings. The waste thickness ranged from approximately 25 to 55 feet with bottom elevations ranging from approximately 390 to 410 feet. Initial groundwater elevations measured right after drilling indicate that groundwater is below the waste mass at the four boring locations. The groundwater elevations will be measured monthly for approximately one year to evaluate the seasonal variability. Documentation of the drilling effort and interpretation of the results will be included in the revised ACM Report.

- c. Stormwater Evaluation – **DEP’s consultant has completed an updated topographic** survey of the landfill, with the exception of the elevations of some drainage structures. They have also completed an evaluation of the infiltration capacity of the landfill cover soil in six locations across the landfill. This information will be used to delineate drainage areas, identify flow directions, estimate runoff and infiltration quantities, and identify areas that may need additional grading or other improvements. The information will also be used to quantify the potential benefits of capping the site, in terms of reduced infiltration and leachate generation.

In December 2015, the revised draft for ACM was submitted by EA Associates.

A meeting with MDE will be held on January 14, 2016 to discuss remediation options.

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 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 #28S near the pond off of the 600 East Gude Drive entrance, and the operations contractor, CB&I, is proposing to convert the monitoring probe #26S into an extraction well and install a new probe within the vicinity of existing probe. The plan will be implemented in March, once the weather is better. Gas monitoring data is regularly provided to the Gude Landfill Concerned Citizens (GLCC) which includes current and historical results.

The monthly meeting, upon request, between GLCC (i.e. the community) and DEP was held on November 12. DEP staff apprised the community of the current status of the ACM revisions. The meetings will continue throughout the remediation process at the Landfill. Written updates will be 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 reduced 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.

Several of the quarterly monitoring data events (November 2014, February 2015, May 2015 and August 2015) indicated considerable improvements after the Phase I PVM well enhancements. However, monitoring reports still indicate exceedances of lower explosive limits in several wells.

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. ERM is currently reviewing the data of the two most recent monitoring events.

Solid Waste Transfer Station – Covanta shipped 155,315 tons of processible waste via rail from the Transfer Station for the second quarter of FY16 compared to 131,850 for the same period last year.

The inbound radiation detectors had 41 total alarms this quarter – 31 alarms by vehicles whose loads were identified as containing low levels of medical isotopes with short half-lives in trash; no alarms from drivers who had undergone recent medical tests. The Public Unloading Facility radiation detectors had ten (10) 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 239 enforcement actions were issued during the reporting period. The enforcement composition breakdown includes:

Code Section	Description	Verbal	NOV	Citation	TOTAL
48.00.05.03(d)	<i>Delivering of solid waste acceptable for recycling</i>	18	2	3	23
48-11	<i>Illegal dumping, dumping in another's container, dumping solid waste on a public right-of-way</i>	0	0	1	1
48-19(a)(1)	<i>Transporting Solid Waste without a valid Collectors/Hauler tag</i>	0	0	0	0
48-19(a)(3)	<i>Person cannot engage in business of collecting or transporting solid waste without obtaining a license</i>	0	0	1	1
48-19(a)(2)	<i>Transporting solid waste without a canvas or tarp covering the load tightly Commercial</i>	35	11	3	29
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>	150	19	1	170
48-20(a)	<i>Un-permitted Vehicle of a Licensed Company</i>	2	0	5	7
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>	2	0	0	2
48-22	<i>Permit required for transporting trash from out of State into County</i>	0	0	1	1
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>	1	2	2	5
	TOTALS	188	34	17	239

Site 2 Landfill Properties – A DGS contractor completed numerous repairs to windows at the Chiswell house. During the quarter a failed septic system at the Chiswell house was discovered. DGS procured a contractor to inspect the system and perform the needed repairs. The Wasche Road house is being prepared for rental.

Yard Trim Compost Facility – The facility received 34,483 tons of material for composting this quarter; this compares with 32,576 tons of materials received during the same period last year. No material was diverted to back-up composting facilities this quarter. There were 17,227 cubic yards of bulk LeafGro™ shipped this quarter; compared with 13,619 cubic yards for the same period last year.

Bagging Operation – 80,450 bags of LeafGro™ were shipped to distributors this quarter. This compares with 112,150 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 second quarter of FY16 approximately 45,395 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 1,434 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 second 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 second quarter, 6,875 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	www.montgomerycountymd.gov/solidwaste www.montgomerycountymd.gov/recycling www.montgomerycountymd.gov/hazardouswaste www.montgomerycountymd.gov/useitagain www.montgomerycountymd.gov/yardtrim www.montgomerycountymd.gov/veggieoil

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

Serena Bell
Department of Environmental Protection
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

SOLID WASTE FACTS IN A NUTSHELL

TOPIC OR FACILITY	
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	91,387
# Residences receiving collection of recyclables in blue bins and yard trim collection	215,152
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
CB&I	Chicago Bridge and Iron Company
CEMS	Continuous Emissions Monitoring System
DAFIG	Dickerson Area Facilities Implementation Group
DEP	Department of Environmental Protection
DGS	Department of General Services
DOT	Department of Transportation
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
MCL	Maximum Containant Level
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
SCS	SCS Engineers
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
VOCs	Volatile Organic Compounds
WSSC	Washington Suburban Sanitary Commission
WVO	Waste Vegetable Oil
YTD	Year-To-Date