



DEPARTMENT OF
**ENVIRONMENTAL
PROTECTION**



Montgomery County, Maryland
DIVISION OF SOLID WASTE SERVICES

QUARTERLY REPORT

APRIL, MAY AND JUNE 2016
(4th Quarter of FY16)



Montgomery County DEP Division of Solid Waste Services' recycling events during this quarter included the Recycling Volunteer Appreciation Reception; School Recycling Poster Contest; Recycling Achievement Recognition Ceremony; and NBC4 Community Shred/Recycling event.

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OVERVIEW

Tonnage at a Glance

The following table shows key material flows during the months of April, May, and June 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	Apr FY16	FY16 YTD	Apr FY15	Apr FY14
Materials Recovery Facility ⁽¹⁾	5,678 tons	60,306 tons	6,234 tons	6,147 tons
Brunswick Landfill Facility ⁽²⁾	0 ton	0 ton	0 ton	0 ton
Resource Recovery Facility ⁽³⁾	55,803 tons	498,918 tons	51,585 tons	50,680 tons
Yard Trim Compost Facility	5,280 tons	54,634 tons	6,029 tons	6,671 tons
Honeygo Run Reclamation ⁽⁴⁾	648 tons	4,970 tons	334 tons	4,002 tons
Other Rubble and Soil Recycling ⁽⁵⁾	4,883 tons	36,825 tons	4,093 tons	0 ton
Ash Recycling (Old Dominion LF) ⁽⁶⁾	16,347 tons	140,905 tons	15,738 tons	14,347 tons

FACILITY	May FY16	FY16 YTD	May FY15	May FY14
Materials Recovery Facility ⁽¹⁾	5,859 tons	66,165 tons	5,905 tons	6,225 tons
Other Landfill Facilities ⁽²⁾	555 tons	555 tons	0 ton	0 ton
Resource Recovery Facility ⁽³⁾	56,776 tons	555,694 tons	49,369 tons	54,026 tons
Yard Trim Compost Facility	5,577 tons	60,211 tons	6,492 tons	6,433 tons
Honeygo Run Reclamation ⁽⁴⁾	1,040 tons	6,010 tons	1,738 tons	5,065 tons
Other Rubble and Soil Recycling ⁽⁵⁾	4,318 tons	41,143 tons	3,417 tons	0 ton
Ash Recycling (Old Dominion LF) ⁽⁶⁾	15,813 tons	156,718 tons	14,016 tons	15,441 tons

(1) MRF tons reported as outgoing.

(2) Refers to bypass waste sent to the landfill for disposal

(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	Jun FY16	FY16 YTD	Jun FY15	Junr FY14
Materials Recovery Facility ⁽¹⁾	6,632 tons	72,797 tons	6,481 tons	6,087 tons
Other Landfill Facilities ⁽²⁾	0 ton	555 tons	0 ton	0 ton
Resource Recovery Facility ⁽³⁾	55,271 tons	610,965 tons	60,984 tons	52,665 tons
Yard Trim Compost Facility	4,895 tons	65,106 tons	5,023 tons	5,754 tons
Honeygo Run Reclamation ⁽⁴⁾	1,406 tons	7,416 tons	546 tons	3,820 tons
Other Rubble and Soil Recycling ⁽⁵⁾	4,647 tons	45,790 tons	5,338 tons	0 ton
Ash Recycling (Old Dominion LF) ⁽⁶⁾	14,592 tons	171,310 tons	17,108 tons	14,473 tons

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

During April, May and June program staff:

- Researched properties and entered billing changes into the database;
- Prepared monthly house counts for collection contractors;
- Processed vacancy refunds payable in April, May, and June;
- **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 April, May, and June 2016 totaling \$4,504,854.62 (an increase of \$754,105.34 above the same quarter in 2015);
- Updated the Aging Report (30-day average arrearage was less than \$10,000 per month for the quarter);
- Reconciled April, May, and June 2016 tons to monies posted in ERP, as well as to the total dollars charged in Paradigm;
- Submitted the FY17 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, June 14, 2016. Topics discussed included the following:

- Abstract for a new report that ties together all three RRF-related environmental reports with focus on consistencies/inconsistencies - DEP
- Discussion of DAFIG rejection of the current air report
- DEP Complaint Report
- SWAC Update
- Facilities Update

The next quarterly DAFIG meeting will be held Tuesday, September 13, 2016.

Solid Waste Advisory Committee (SWAC)

April – Meeting Cancelled.

May – Meet and greet with Dan Locke, Division Chief, DSWS.

June – Committee discussed refuse collection in Subdistrict B, and reviewed the data provided by DEP on recycling in Subdistrict A vs. B. **Discussion about the County's** plans to recycle food scraps. No definitive plans have been made, but SWAC is very interested in participating in the planning process.

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.

April 2016	81
April 2015	57
Difference	+24

May 2016	79
May 2015	63
Difference	+16

June 2016	123
June 2015	83
Difference	+40

Resident Service Requests:

April 2016

22 gallon bin pick-up	578
22 gallon bin request	1,816
Bulk trash requests	2,452
Cart pick-up	17
Cart repair	398
65 gallon cart	124
35 gallon cart	115
Field check	290
Literature	243
Property damage/missing	23
Same day	286
Scrap Metal request	2,332

May 2016

22 gallon bin pick-up	533
22 gallon bin request	1,788
Bulk trash requests	2,352
Cart pick-up	16
Cart repair	331
65 gallon cart	158
35 gallon cart	106
Field check	241
Literature	270
Property damage/missing	18
Same day	259
Scrap Metal request	2,195

June 2016

22 gallon bin pick-up	618
22 gallon bin request	2,008
Bulk trash requests	2,731
Cart pick-up	21
Cart repair	415
65 gallon cart	169
35 gallon cart	110
Field check	365
Literature	311
Property damage/missing	38
Same day	367
Scrap Metal request	2,568

Outreach:

Survey Cards:

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

In April, 1,161 cards were dropped off with a return rate of 9%.

	Excellent	Good	Average	Fair	Poor
Service Request Fulfillment	90%	7%	1%	1%	1%
County Provided Collection Services	72%	23%	5%	0%	0%

In May, 811 cards were dropped off with a return rate of 7%.

	Excellent	Good	Average	Fair	Poor
Service Request Fulfillment	97%	3%	0%	0%	0%
County Provided Collection Services	83%	17%	0%	0%	0%

In June, 1,295 cards were dropped off with a return rate of 7%.

	Excellent	Good	Average	Fair	Poor
Service Request Fulfillment	94%	4%	1%	1%	0%
County Provided Collection Services	75%	21%	4%	0%	0%

Collection Section Enforcement Actions:

April:

- Citations: There was one (1) citation issued.
 - Collected solid waste within the County without a valid collectors tag 48-20a.
- Notices of Violation: There were five (5) Notice of Violation issued.
 - Collected solid waste within the County without a valid collectors tag 48-20a.
 - Deposited solid waste on a public highway 48-11.
 - Dumping solid waste on land of another or upon any public highway 48-11.
 - Unlawful storage of solid waste 48-24a.
 - ER 109-02AM Section 3, Subsection 3c. Setting out recycling containers prior to the allowable hours.

May:

- Citations: There were four (4) citations issued.
 - Collected solid waste after 9 p.m. and before 7 a.m. within 500 feet of a Residential structure 48-21b. (All 4).
- Notice of Violation: None issued.

June:

- Citations: There was none issued.
- Notice of Violation: There was one (1) Notice of Violation issued.
 - Left collection vehicle running and unattended 48-23.

Website:

Solid Waste Services Website

Metric	April 2016	May 2016	June 2016
Users	31,056	36,174	33,471
Sessions	48,824	55,217	52,693
Page Views	119,852	129,959	126,106

Email List Memberships

Topic	Subscribers (new this month)		
	April 2016	May 2016	June 2016
Holiday Reminder	25,471 (0)	25,370 (0)	25,233 (1)
Holiday Reminder (by route)	5,299 (94)	5,437 (152)	3,502 (99)
HHW Announcements	12,758 (0)	12,721 (0)	12,721 (0)
Facility Updates	7,601 (75)	7,627 (61)	7,649 (74)
Electronics recycling	11,566 (120)	11,601 (82)	11,100 (137)
Expanded Polystyrene Ban news and updates	237 (15)	248 (13)	268 (23)
Go Green	5,102 (0)	5,080 (0)	5,080 (0)
Civic Loop	4,218 (9)	4,202 (6)	4,192 (16)
SORRT Newsletter	3,715 (9)	3,627 (6)	3,632 (15)
TRRAC Newsletter	2,337 (9)	2,326 (6)	2,318 (16)
Quarterly Report	2,751 (12)	2,746 (13)	2,748 (18)
Paper Shredding Events	9,546 (102)	9,581 (75)	9,633 (135)
Recycling Volunteers – Active	160 (0)	160 (0)	243 (0)
Recycling Volunteers – Prospective	210 (0)	210 (0)	144 (0)
Learn about new web features	184 (10)	191 (9)	207 (18)
Total Subscriptions	90,971 (455)	90,936 (423)	90,969 (581)

Most Popular Web Pages

April 2016	May 2016	June 2016
1. Drop-off hours and events	Drop-off hours and events	Drop-off hours and events
2. Recycling, Trash, and Yard Trim Programs – home	Recycling, Trash, and Yard Trim Programs – home	Bulk trash
3. How do I...home page	Bulk trash	Recycling, Trash, and Yard Trim Programs – home
4. Bulk trash	Collection Day Lookup	Web Store – home page
5. Transfer Station – home page	Transfer Station – home page	Collection Day Lookup
6. Web Store – home page	Holidays	How do I...home page
7. DSWS home page	How do I... – home page	DSWS home page
8. Collection Day Lookup	Web Store – home page	Transfer Station – home page
9. Paper shredding	DSWS home page	Web Store – Single-family recycling containers
10. Web Store – Single-family recycling containers	Web Store – Single-family recycling containers	Holidays

ADDITIONAL RECYCLING

Product Recycled	Apr FY16	FY16 YTD	Apr FY15	Apr FY14
TV's and PC's	153 tons	1,427 tons	119 tons	172 tons
Propane Tanks	2 tons	20 tons	2 tons	0 ton
Textiles	12 tons	110 tons	10 tons	11 tons
Construction Materials (Don't Dump – Donate)	0 ton	12 tons	0 ton	2 tons
Vehicle Batteries	10 tons	90 tons	10 tons	8 tons
Scrap Metal	752 tons	5,393 tons	486 tons	396 tons

Product Recycled	May FY16	FY16 YTD	May FY15	May FY14
TV's and PC's	155 tons	1,582 tons	142 tons	141 tons
Propane Tanks	4 tons	24 tons	2 tons	2 tons
Textiles	6 tons	116 tons	12 tons	13 tons
Construction Materials (Don't Dump – Donate)	0 ton	12 tons	1 ton	0 ton
Vehicle Batteries	5 tons	95 tons	7 tons	8 tons
Scrap Metal	689 tons	6,082 tons	544 tons	570 tons

Product Recycled	Jun FY16	FY16 YTD	Jun FY15	Jun FY14
TV's and PC's	151 tons	1,733 tons	203 tons	172 tons
Propane Tanks	4 tons	28 tons	6 tons	0 ton
Textiles	0 ton	116 tons	13 tons	11 tons
Construction Materials (Don't Dump – Donate)	0 ton	12 tons	3 tons	2 tons
Vehicle Batteries	14 tons	109 tons	14 tons	7 tons
Scrap Metal	751 tons	6,833 tons	574 tons	535 tons

HAZARDOUS WASTE PROGRAMS

Household Hazardous Waste (HHW) Collection – There were a total of 25,551 patrons to the program in the fourth fiscal quarter (April, May, and June). During normal business hours we had 24,597 patrons; after 5:00 p.m., we had 954 patrons.

Small Quantity Generator/ECOWISE Program – There were 57 ECOWISE participants in the fourth quarter that discarded 3.41 tons of business related hazardous materials.

WASTE REDUCTION

Bicycle Recycling – Several nonprofit organizations removed 5 tons of bikes in the fourth fiscal quarter for shipment to countries worldwide.

Paint Reduction – The free paint giveaway program through the County paint store reuse program opened for the season during the fourth quarter with more than 382 gallons of latex paint given to 63 County residents and more than 29.21 tons was donated to nonprofit organizations. Paint that does not have the ability to be reused or donated is solidified and further processed which resulted in 6,500 gallons of paint being 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 fourth fiscal quarter, 14 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 exceedance 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 April was 2.09 inches; May was 5.22 inches and June was 6.35 inches.

WASTE REDUCTION AND RECYCLING

Public Education and Outreach – The Waste Reduction and Recycling Section staff and Recycling Program Volunteers participated in a total of 22 community education, outreach events and activities between April 1, 2016 and June 30, 2016, reaching an estimated total audience of 8,960 people. Staff continued to answer questions from businesses and residents about the ban on the use and sale of expanded polystyrene food service products and packaging peanuts. Staff also responded to three requests for information pertaining to the expanded polystyrene food service ware ban. The informational fact sheet on the ban, posted on the DSWS website, continues to be distributed at events and during on-site visits to businesses conducted by Smart Organizations Reduce and Recycle Tons (SORRT) Program staff. Staff also conducted presentations to inform businesses and multi-family property managers and their staff about the ban on expanded polystyrene food service ware during both the Multi-Family Recycling Program seminar on April 7, and the Business Recycling seminar held on June 8. Staff and recycling program volunteers participated in 70 education and outreach events for Earth Month (April 2016), reaching a total of 8,495 people. At the

2nd Annual Greenfest on April 30, staff provided information and distributed reusable bags made from recycled plastic bottles to almost 1,000 people. In addition, staff assisted participants with making personalized buttons to wear and show their commitment to reducing waste and recycle 70 percent by 2020. Staff hosted a total of four confidential paper shredding/recycling and reusable item donation events during the spring. A total of 4,711 drove through the events, and staff collected 145,911 pounds of paper for shredding and recycling. The next series of events will be held in the fall. Staff also provided technical assistance, outreach, training and on-site monitoring of the recycling efforts at the 2016 Quicken Loans National golf tournament from June 20 through June 26. We also provided the use of 300 Clear Stream event recycling containers for vendors, staff, visitors, players and officials to recycle mixed paper and commingled materials.

On-Site Composting and Waste Reduction Activities – A total of 984 backyard compost bins were distributed this quarter 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 hosted a compost bin pick-up event at Meadowside Nature Center on April 1. Staff and recycling program volunteers spoke to 156 people, demonstrated the composting process at the demonstration compost bin and distributed 104 compost bins during the 4-hour event. In addition, staff and recycling volunteers participated in three composting workshop events to 126 people, providing detailed information on backyard and on-site composting. There are currently 22 compost bin pick-up locations throughout the County, several of which offer evening and weekend hours, where residents can obtain a compost bin. Staff received and completed 23 requests for compost bins be delivered to the distribution sites during this period. Staff responded to seven requests for information or materials during this quarter.

Recycling Investigations Unit – Since the unit was established in 2005, 69,710 site visits and 6,862 formal investigations have been conducted. During this quarter, 175 NOVs were issued to businesses and multi-family properties for infringements against the recycling regulations and Chapter 48. A total of 17 citations were issued to businesses and multi-family properties for the following reasons: eleven (11) citations were issued to businesses for failure to recycle required recyclable materials; two (2) citations were issued to medium-sized businesses for failure to submit their annual recycling and waste reduction report; one (1) citation was issued to a business 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 business for failure to provide and maintain an approved container for storage of solid waste; and two (2) citations were issued to multi-family properties for failure to properly maintain the premises by permitting solid waste to be stored outside of storage containers.

Commercial Recycling and Waste Reduction – Staff of the SORRT Program conducted 2,901 site visits to businesses this quarter. Staff resolved six complaints, participated in 87 educational events reaching 6,495 people, distributed 2,378 desk-side

recycling bins and 186 “slim jim” recycling containers to businesses to help set-up and/or improve existing recycling programs, and responded to 120 requests for information ranging from educational materials to presentations for property managers, tenants, and employees. On June 8, the SORRT program hosted a business recycling seminar at the Bethesda North Marriott Hotel and Conference Center. The seminar provided business owners, managers, employees and property management staff with **information on the County’s recycling and solid waste regulations, roles and responsibilities**, and how to set up a successful recycling program. Fourteen businesses/organizations participated, including property managers, business owners, and staff who attended the seminar. Staff completed a distance study to determine whether the distance between a commercial site and the collection containers affects recycling participation. The study is currently being reviewed and results will be finalized by the end of August. Other work on projects underway include creating an activity book for children that highlights recycling at non-residential sites, and a web-based training tutorial on on-line filing of Annual Waste Reduction and Recycling Reports.

Multi-Family Recycling and Waste Reduction – During this quarter, Think Reduce and Recycle at Apartments and Condominiums (TRRAC) Program staff conducted 693 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 19 multi-family property educational events, reaching 999 people. These events included community recycling displays and several resident recycling presentations, staff trainings, resident board meetings, lobby events, seminars and webinars. Staff also responded to 66 requests for information; resolved ten complaints; and distributed 3,083 baby blue (6-gallon) multi-family recycling bins, ten Slim Jim (23-gallon) recycling containers, 55 WasteWatcher XL (32-gallon) recycling containers, 164 Brute (44-gallon) recycling containers, and 16 Glutton (55-gallon) recycling containers to multi-family properties to increase available recycling capacity. The April 7 Multi-Family Recycling Seminar was held at the Bethesda North Marriott Hotel and was attended by 33 multi-family property managers and staff. TRRAC staff continued conducting field verifications of all CY2015 multi-family annual recycling reports. The summer (June 2016) issue of the TRRAC Newsletter was published and an announcement (with the link to the newsletter PDF) was emailed to 2,342 email addresses registered on the multi-family newsletter listserv.

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 70 Recycling Program Volunteers, some participating in multiple events, contributed almost 246 hours of their time and effort to support recycling activities this quarter. One volunteer provided over 45 hours of office assistance which included filing and preparing bundles of educational materials for distribution at various outreach events. During this quarter, 18 volunteers participated in nine community outreach events and provided 60 hours of direct service to disseminate information on waste reduction, reuse, recycling and composting to residents. The events included: **St. Elizabeth Earth Day, St. John’s Norwood Earth Day, Rockville Science Day, Silver Spring Composting Presentation, YMCA Kid’s Day, Master Gardner’s Grow It Eat It, Quarry Day Open House at Trville, Long Branch Unity Festival, and Celebrate Gaithersburg.** In addition, 12 volunteers contributed almost 43 hours of service during 3 paper shredding/recycling and reuse collection events. 27 volunteers contributed over 106 hours of service during the larger scale NBC4 Community Shred/Recycling event in June. Four Neighborhood Captain volunteers contributed almost four hours of service providing outreach and education about waste reduction, recycling and backyard composting to neighbors, and distributed recycling information to 45 homes. During the month of April, five volunteers also assisted staff during a backyard composting workshop and compost bin distribution event providing 16 hours of service. During the annual Recycling Volunteer Appreciation and Recognition Ceremony, volunteers received certificates of appreciation for their ongoing support to the recycling program and services throughout the fiscal year. Several volunteers also received special recognition service pins for providing 20 hours of service or more during FY16. Volunteer recruitment efforts continued during this quarter with staff attending two volunteer fairs in April at the Montgomery College Gaithersburg and Takoma Park/Silver Spring campuses providing information about recycling volunteer opportunities. During these two events, staff recruited 62 prospect volunteers in addition to the 43 prospect volunteers recruited through other means. The recycling volunteer program also recruited seven new volunteers and 17 volunteer applicants. Six **volunteers received information about the County’s various recycling and solid waste programs** during two new volunteer orientation sessions held this quarter on May 21 and June 14. The next new volunteer orientation training has been scheduled for July 16, and a special volunteer training is being planned for July for all the volunteers who will be assisting staff during the Montgomery County Agricultural Fair. During this quarter staff also prepared and distributed the Spring Edition of the Recycleletter newsletter to recycling program volunteers. There are 336 active recycling program volunteers as of June 30, 2016.

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 – May 31, 2016) in which pre-consumer food scraps are separated for recycling collection, a total of 84.4 tons of food waste has been collected and recycled. DEP continues to monitor the collection area daily and checks for feedback from cafeteria staff on a regular basis. During this quarter, the collection of pre-consumer food scraps for recycling was expanded to include the cafeteria at the Council Office Building, and the cafeteria at the Public Safety Headquarters Building.

FACILITY ACTIVITIES

Resource Recovery Facility (RRF) – The RRF processed a total of 167,850 tons for the quarter, or an average of 1,845 tons per day. During this time nine tours of the plant were given. The plant exported 99,017,000 kilowatt-hours to the power grid. About 3,181 tons of ferrous material was recovered from the ash and recycled.

During the quarter, Unit #2 was down for its scheduled major maintenance outage which was terminated early as explained later. Unit #1 was down on five separate occasions for repairing eight tube leaks. Unit #2 came down to repair a stoker processor failure. Unit #3 came down on three separate occasions to repair superheater tube leaks and once to repair a furnace tube leak. In early May the unscheduled outages began to overlap at a time when the pit inventory of trash was high and incoming trash receipts were increasing. Storage capacity was being pressed and so the County bypassed about 553 tons of trash to the Out-of-County landfill while the operator brought Unit #2 back online, terminating its outage early. Any items scheduled during the outage that were not done will be completed in the fall outage for Unit #2.

Materials Recovery Facility (MRF) – During the fourth quarter, the following items were addressed: ten conveyor belts were replaced due to wear or damage; nine sets of bearings were replaced; due to wear and corrosion, three conveyor beds were repaired to prolong the wear of the conveyor belts; five lacings were replaced due to tears in the belt; seventeen rollers were replaced due to wear and tracking; three adjusters were replaced on the old Bezner equipment; and general repair and maintenance was performed on all processing equipment. Our rolling stock saw several items addressed during this reporting period. On our Hyster #1 forklift, one engine head was replaced, the oil sensor sender was replaced, and tires were replaced. On our Hyster #2 forklift, the carriage and bushing were replaced and the timing belt and crank gear were replaced, tires were replaced on the TCM forklift and the 966 F Loader; the sweeper brush was replaced on the sweeper, and cutting edges were replaced on all loaders. The following work was conducted on the facilities – A new roof was installed on the recycling scale house, the air condition (A/C) unit was repaired, a new A/C was installed

on the roof above the pre-sorting area, several thermostats were replaced, and 30-pounds of freon was added to the administrative office area air conditioning unit.

Oaks Landfill – Power Plant Update - The 2.4 mw landfill gas-to-energy (LFGE) facility continued to operate.

In April, the Cat 3520 engine operated at 70.31% availability and the Jenbacher 316J engine at 79.50% availability, and a production capacity of 87.20% and 99.13% respectively. The averaged output of the Cat was 1488.00 kw and the Jenbacher was 803.81 kw for the month.

In May, the Cat 3520 engine operated at 13.87% availability and the Jenbacher 316J engine at 98.39% availability and a production capacity of 97.50% and 98.62% respectively. The averaged output of the Cat was 1422.45 kw and the Jenbacher was 801.77 kw. Engine #1 ((CAT 3520) was inoperable for the majority of May 2016 due to a mechanical failure in the aftercooler and oil cooler. **The County's contractor, Chicago Bridge & Iron (CB&I)**, installed the flow meter on the automatic flare which a title V air permit requirement.

In June, the Cat 3520 engine operated at 96.52% availability and the Jenbacher 316J engine operated at 91.52% availability and a production capacity of 98.50% and 93.35% respectively. The averaged output of the Cat was 1460.10 kW, and the Jenbacher was 704.52 kW for the month. The Maryland Department of the Environment (MDE) approved Oaks LFGTE Facility Operations, and Maintenance Control Plan includes an action limit of 110 ppm of NOx for each engine. If readings exceed 110 ppm, a follow-up test shall be done within 24-hours. If the subsequent test is greater than 110 ppm, appropriate corrective action must be employed. Due to the continued high readings obtained on June 17, 18 and 21 after the calibration, ECOM EN-2F analyzer unit was taken out of service on June 21 and sent to the factory for inspection/service.

Groundwater Quality Update – SCS Engineers is doing a two-year groundwater monitoring evaluation to assess whether an expansion of the gas collection system is helping to reduce volatile organic compounds (VOCs) in groundwater. The County sent the semi-annual and quarterly groundwater monitoring data to SCS for evaluation purposes. The spring quarterly data was gathered on April 20, 2016. The report was sent to SCS on June 2016. So far, data from three sampling events have been analyzed, and no significant conclusions are evident yet. The study will end by December 2016.

CB&I completed the gas sampling around the landfill for the second quarter gas monitoring events in June and no exceedances were noted.

In June, 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.

The Pretreatment and Oil and grit management facility are functioning normally. DEP received the draft Discharge Authorization Permit from the Washington Suburban Sanitary Commission (WSSC). DEP is currently reviewing the draft permit and working with **DEP's Watershed Management Operations Division** to revise the waste certification plan.

Gude Landfill – The 0.8 mw landfill gas-to-energy (LFGE) facility continues to operate.

In June 2016, the landfill gas to energy facility was operating at 94.65% availability and a production capacity of 97.13%. The engine had an average output of 753.77 kw. Normal monthly maintenance activities continued at the facility.

In May 2016, the landfill gas to energy facility operated at 67.93% availability and a production capacity of 96.02%. The engine had an average output of 773.52 kw. The Gude plant was down from May 3 through 12, 2016, due to water collecting inside the 440 cabinet, shorting out some components. On the night of May 12, the engine was fixed and brought up. Normal monthly maintenance activities continued at the facility.

In April 2016, the landfill gas to energy facility operated at 97.65% availability and a production capacity of 99.3%. The engine had an average output of 767.51 kw for the month. Normal monthly maintenance activities continued at the facility.

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. There have been continued exceedances with well #26S 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 the existing probe. The new location and well design was approved by DEP in June and the contractor applied for all the necessary drilling permits. Work is expected to start on August 15, 2016. Gas monitoring data is regularly provided to the Gude Landfill Concerned Citizens (GLCC) which includes current and historical results.

The CB&I completed the gas sampling around the landfill for the second quarter gas monitoring events in June and a few exceedances from well #26S were noted.

In June 2016, DEP performed the quarterly inspection of Stormwater outfalls at the Gude Landfill. There were no non-stormwater discharges observed at any of the outfall locations.

The monthly meetings with GLCC 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. On May 14, 2016, DEP personnel took some GLCC members to Midshore II Regional Solid Waste Facility to observe the conditions of the landfill during the capping of landfill.

Beantown Dump Project – This project involves reducing the presence of methane gas at the former Beantown Dump located near the intersection of Gude Drive and Dover Road.

DEP completed the quarterly gas monitoring in May. Results indicated reduced methane concentrations at the old dump site, after Phase I, Passive Venting Monitoring (PVM), well enhancements. However, monitoring reports still indicate exceedances of lower explosive limits in several wells. Due to the report from Environmental Resources Management (ERM) indicating the modifications which included the vertical extension of the gas venting wells and the addition of passive turbines are effective, DEP determined that no further studies are required by ERM. However, DEP will continue the quarterly monitoring.

Solid Waste Transfer Station – Covanta shipped 167,066 tons of processible waste via rail from the Transfer Station for the fourth quarter of FY16 compared to 157,169 for the same period last year.

The inbound radiation detectors had 42 total alarms this quarter – 34 alarms by vehicles whose loads were identified as containing low levels of medical isotopes with short half-lives in trash; seven alarm from drivers who had undergone recent medical tests, and one false alarm. The Public Unloading Facility radiation detectors had ten 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 371 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>	12	2	1	15
48-10	<i>Unlawful to dispose of, deposit or leave solid waste at other than an approved Transfer Station</i>	0	0	0	0
48-11	<i>Illegal dumping, dumping in another's container, dumping solid waste on a public right-of-way</i>	0	1	0	1
48-19(a)(1)	<i>Transporting Solid Waste without a valid Collectors/Hauler tag</i>	0	1	2	3
48-19(a)(3)	<i>Person cannot engage in business of collecting or transporting solid waste without obtaining a license</i>	0	0	4	4
48-19(a)(2)b	<i>Transporting solid waste without a canvas or tarp covering the load tightly Commercial</i>	33	7	4	44
48-19(2a)(a)	<i>Improper or no tarps on resident vehicle</i>	265	18	5	288
48-20(a)	<i>Un-permitted Vehicle of a Licensed Company</i>	1	3	8	12
48-20(d)	<i>Unsafe Vehicle</i>	0	0	1	1
48-22	<i>Permit required for transporting trash from out of State into County</i>	2	0	0	2
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	0	0	0
	TOTALS	313	32	26	371

Site 2 Landfill Properties – During this quarter, the **Department of General Services'** (DGS) contractor that repaired the failed septic system at the Chiswell house, returned to properly grade and seed the ground where it was disturbed. The Wasche Road house continued to need repairs discovered as Real Estate began the rental process. The shed structure at the Draper property had reached the end of its usefulness and was removed. The ground was graded and seeded.

During the quarter, staff performed its annual inspection of the Site 2 properties. Staff also reached out to the Historic Preservation Office for guidance and cooperation in addressing the open hole bore well at the Chiswell property, and is waiting for a response from the Historic Preservation Office.

Yard Trim Compost Facility – The facility received 15,751 tons of material for composting this quarter; this compares with 17,544 tons of materials received during the same period last year. No material was diverted to back-up composting facilities this quarter. There were 11,705 cubic yards of bulk LeafGro™ shipped this quarter; compared with 22,484 cubic yards for the same period last year. (sold out of material early).

Bagging Operation – 200,300 bags of LeafGro™ were shipped to distributors this quarter. This compares with 122,300 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 fourth quarter, approximately 46,752 tons of ash residue were transported to the Old Dominion Landfill for ash recycling and metal recovery. There were also 555 tons of municipal solid waste bypassed directly to Old Dominion Landfill during a period when the County was receiving more waste than could be processed by the RRF. 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 3,093 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.

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 fourth quarter, 13,849 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/yardtrim

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	612,217 (CY14)
Latest Recycling and Waste Diversion Rate Reported in Montgomery County	60.71% (CY14)
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 FY16, 65,104 tons of yard trim were received at the Dickerson Facility.</p>
# Residences receiving trash collection by County contractors	91,454
# Residences receiving collection of recyclables in blue bins and yard trim collection	215,748
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

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
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
MDE	Maryland Department of the Environment
MES	Maryland Environmental Services
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
YTD

Waste Vegetable Oil
Year-To-Date