

Montgomery County Yard Trim Compost Facility

ENVIRONMENTAL SYSTEM

DAFIG - June 8, 2021





DEPARTMENT OF
**ENVIRONMENTAL
PROTECTION**
MONTGOMERY COUNTY • MARYLAND

MISSION STATEMENT

The Department of Environmental Protection (DEP) works to enhance the quality of life in our community by protecting and improving Montgomery County's air, water and land in a sustainable way while fostering smart growth, a thriving economy and healthy communities.

2020 Management Review (MR)

- To determine if the EMS is suitable, adequate and effective
- To review status of past MR recommendations
- To review our ability to show continuing improvement
- To determine action items to assure future improvement

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1. Progress Towards Targets

- Significant Environmental Aspects and Impacts matrix was updated
 - ✓ Active Environmental Management Programs: 5
 - ✓ Additional impacts are followed-up and monitored
- Targets were updated and attained during CY2020
- Environmental Policy Statement (updated)
<https://www.montgomerycountymd.gov/sws/facilities/cf/eps.html>

2. Significant Environmental Aspects and Impacts (2020 update)

Process	Environmental Aspect (Activity)	Potential Impact	Objective	Target
Materials Processing	1) Decomposition of yard trim in windrows 2) Delayed delivery of truck transport, and 3) Vendor deliveries	Potential for fire hazard and potential material ignition	Reduce the risk of fire	No fire incidents in a calendar year
Stormwater Control	Stormwater discharges	Water quality degradation	Compliance with all NPDES permits	Achieve 100% compliance with the NPDES permit discharge limits
Field Onsite Operations	Composting equipment powered by fossil fuel	Air pollution & GHG effects	Reduce air pollution Improve fuel efficiency	Reduce fossil fuel consumption by 5%
Field onsite operations	Purchase of operational supplies	Use of natural resources and GHG effects	Reduce indirect air pollution and GHG effects	Minimum of 50% of Bagging Supplies expenses spent on Recycled/Rebuilt, Pallets, Slip Sheets, Biogenic Polyethylene Bags, Pallet Shrouds, Stretch Film
Lighting	Use of electricity	Air pollution; GHG effects	Reduce air pollution and GHG effects through reduced use of electricity	Reduce GHG emissions (electricity weather normalized)



3. 2020 Inspections and Compliance

SPCC Inspection Dates			
1/16/20	4/15/20	7/14/19	10/19/20
2/12/20	5/19/20	8/24/20	11/23/20
3/20/20	6/17/20	9/23/20	12/21/20

- **ECR Self-Audit Completed:** April 14, 2020
- Integrated Compliance Protocol per 9.1.2 May 26, 2020
- **Evaluation of Compliance:**

SWPPP Inspections			
3/17/20	6/16/20	9/19/20	12/15/20
No Findings	No Findings	No Findings	No Findings

- **Annual Stormwater Compliance Report:** May 20, 2020
- 12-SW Quarterly Testing Results: No findings
- 12-SW Corrective Actions 5 phosphorous exceedances
- **MDE Inspections**
 - 6/9/2020 Compost Permit Inspection No Findings

4. 2020 Performance Metrics

Emergencies:	None
Odor Complaints:	None
NOV's	None

Diesel Fuel Consumption

- ✓ 41% less than FY 2012 (material processed only 11% less), 5.5 M Kbtu used vs 9.0M Kbtu in 2014
- ✓ When comparing to the base fiscal year 2014, overall, the facility produced 13% less GHG emissions
- ✓ GHG emissions by fossil fuel consumption when down 15% when comparing to the base fiscal year FY2014
- ✓ GHG emission by electricity consumption in the pavilion when down by 6% when comparing to the base fiscal year FY2014
- ✓ Diesel screener replaced with electric unit Nov 2019

4. 2020 Performance Metrics (continuation)



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- Inspections: No findings
- Yard trim received: 63,661 tons
- Bulk product sold: 20,142 tons
- Screen overs sold: 4,496 tons
- Overs sold: 3,736 tons
- # bags produced: 650,000 (15,369 tons)

5. 2020 Administrative Changes and Accomplishments



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- No County or MES Staff Turnover
- Administrative changes due to the Covid-19 Pandemic
- Full review of Significant Environmental Impacts and Aspects. Targets updated
- Updated Information on website
- EMS training complete. Year 2021 will be focused on training field staff
- Monthly Reports & DAFIG Reports are no longer being printed
- The copier paper used in 2020 was 100% recycled content
- Communication with customers, vendors and contractors

6. 2020 Operational Accomplishments



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- Installation of Electric Screen System
- Steady reduction of fossil fuel reduction
- Overall GHG emissions have been reduced; the Facility has a history of meeting or exceeding its compliance obligations.
- Fire prevention measures have been successful.
- Fuel consumption per ton processed is less than the base year.
- When comparing to the base year 2014, overall, the facility produced 13% less GHG emissions
- GHG emissions by fossil fuel consumption when down 15%,
- GHG emission by electricity consumption in the pavilion when down by 6%
- 86% Reduction in cost to heat shop when comparing six-year average before and after waste oil furnace
- Chemicals were replaced with a greener version

7. 2021 Targets Highlights



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- Improve record keeping of tons in and out using Paradigm system only
- Continue current training schedule on EMS and operational matters
- Reduce carbon footprint by replacing equipment with hybrid/electric if available, LED fixtures across the facility, and continue meeting virtually only.
- Intensify research for reductions in Environmental Impact in office supplies and packing materials (Stretch film, Slip sheets, Pallet shrouds)
- Stormwater System Improvements
- Acquire Compost Manager system