**MATERIAL FLOW DIAGRAM**

*Calendar Year 2017*

**Stream No.**

1. Construction & Demo Debris Private Export* (Recycled & Non-recycled) *Licensed Collector Reports under ER 5-13AM* Consumed by Private Sector Collectors
2. Recycled via non-County Facilities *Reported by Compost Facility Manager*
3. County Recycling Facility Material Sales *County TS & MRF Scale Records*
4. Mulch Loaded Out From TS *County TS Scale Out Records*
5. Non-Processibles Landfilled* *County TS Scale Out Records*
6. Loaded on Rail to RRF (MSW burned) *Covanta Scales as Loaded*
7. Loaded on Rail to RRF (C&D burned) *County Transfer Station (TS) Scale Records*
8. By-pass (Accepted Processible Landfilled) *County TS Scale Out Records*
9. By-pass (Accepted Processible Landfilled) C&D *County Transfer Station (TS) Scale Records*
10. Refuse Disposed Out of County *Audited 6-Mo. Hauler Reports*
11. All Incoming Leaves and Grass *Compost Facility & TS Scale Records*
12. Composting Residue to RRF *Covanta Scale Records*
13. Ash outgoing from Ash Recycler (C&D Residue) *Not included in MRA recycling calculation*
14. Ferrous recovered at RRF (C&D Residue) *Internal Calculation*
15. Ash Loaded to Ash Recycling Contractor *Republic Monthly Report*
17. All Ash not recycled *Covanta Scale Records*

**Sources of Data**

1. Audited or otherwise documented. Often based on truck scales of others.
2. Data is from State-certified County truck scales owned by County.
3. This color indicates C&D waste, which is not MSW, not eligible for recycling and is not to be included in recycling rate calculation.*
4. Data is from State-certified truck scales, privately operated under contract to County.

**MATERIAL SOURCES OF DATA**

**Total Waste Generation, Including C&D Exported by Private Sector**

<table>
<thead>
<tr>
<th>Total Tons</th>
<th>Not included in MRA recycling calculation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,378,396</td>
<td></td>
</tr>
</tbody>
</table>

**MSW Generated (above less streams 4, 5, 6a and 6c)**

<table>
<thead>
<tr>
<th>Total Tons</th>
<th>Not included in MRA recycling calculation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,103,051</td>
<td></td>
</tr>
</tbody>
</table>

**Montgomery County Recycling Rate and Waste Diversion Rate Calculations (MRA Method)**

<table>
<thead>
<tr>
<th>Recycling Rate</th>
<th>Numerator</th>
<th>Denominator</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1 + 2 + 3 + 4 + 5 + 6 + 6a + 6c)</td>
<td>616,733</td>
<td>1,103,051</td>
<td>55.91%</td>
</tr>
<tr>
<td>(1 + 2 + 3 + 4 + 5 + 6 + 6a + 6c) + 5.0%</td>
<td>616,733</td>
<td>1,103,051</td>
<td>60.91%</td>
</tr>
</tbody>
</table>

**Waste Diversion Rate**

<table>
<thead>
<tr>
<th>Waste Diversion Rate</th>
<th>Numerator</th>
<th>Denominator</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>***</td>
<td><strong>616,733</strong></td>
<td><strong>1,103,051</strong></td>
<td><strong>60.91%</strong></td>
</tr>
</tbody>
</table>

**Notes:**

* Construction & Demolition waste (C&D) is waste identified by place of origin - construction or land clearing sites. C&D is reported on licensed hauler reports, but there may be additional C&D tons not reported and therefore not included in stream 0.

** Non-processibles are Construction & Demolition-type materials: not eligible for recycling credit, but are County-managed solid waste.

** Recycling rate = Recycle Rate + 5.0% Source Reduction Credit

**Nomenclature:**

"C&D" means "Construction and Demolition" waste, exclusive of MSW, traditionally managed by the private sector, but much now comes to County TS.

"CMW" means "County Management Waste". It includes all MSW, whether or not exported by private sector collectors, but only C&D delivered to TS.

"MSW" stands for "Municipal Solid Waste", and represents the waste eligible for recycling under the State recycling law, regulations and guidelines.

"TS" stands for the County's Transfer Station, located in Derwood, Maryland, just south of Gaithersburg.

"MRF" stands for Material Recovery Facility

"RRF" stands for Resource Recovery Facility