Materials Recovery Facilities Fact Sheet

Recyclables Processing: An important part of waste management in Virginia

What is a MRF:

Recyclables collected from residences and businesses in Virginia are not sent to landfills or other disposal facilities, rather, to recyclables processing facilities known as Material Recovery Facilities (MRFs). The MRF separates recyclables by material type through a combination of employee and sophisticated automated sorting systems. From there, the MRF packages recyclables for transport and sells them to companies that convert these materials into feedstocks for new products. Most of the MRFs in Virginia are owned and operated by private companies. MRFs often function as regional facilities, serving multiple jurisdictions.

MRFs in Virginia:

By state law, Virginia jurisdictions are responsible to recycle 15-25% of their solid waste by weight, as such, MRFs are an essential component of solid waste management plans and systems. However, many jurisdictions struggle with collecting and reporting accurate recycling tonnage statistics to DEQ.

The state does not require MRFs to report tonnage statistics to jurisdictions and solid waste planning units (SWPUs). Even when MRFs voluntarily report these tonnages, often they are not broken out by jurisdiction of origin. Virginia could learn from other states that require MRFs to report recyclables tonnages by jurisdiction through permit by rule (PBR) approaches, or registration, or permitting based on operational capacity. Localities would benefit from registration or PBR, defining a MRF using a minimum recovery rate of collected materials to distinguish a MRF from a waste transfer or waste recovery facility.

From a 2018 national query of state waste managers, the Northern Virginia Waste Management Board (NVWMB) received information from 12 states. Six required MRF registration (Delaware, Michigan, New Mexico, Rhode Island, South Carolina, and Wyoming), four state required permitting of MRFs (Connecticut, Delaware, Massachusetts, and Wyoming), and eight states required annual or quarterly reporting (Connecticut, Delaware, Florida, Massachusetts, Michigan, New Mexico, Rhode Island, South Carolina, Tennessee, and Wyoming).

In Virginia, MRFs are not registered, permitted, or regulated

MRFs are not required to obtain DEQ-issued permits for their siting, design or operation, nor are they required to report any information to the DEQ. While the NVWMB seeks to limit regulation without merit, there is rationale for requiring MRFs to be regulated to a certain extent, including:

- Provision of accurate data on the quantities of material recycled so that jurisdictions can provide accurate reports to DEQ.
- Prevention of illegal disposal of wastes diverted through unregulated recycling facilities that do not adhere to proper waste management practices.
- Prevention of illegal disposal of hazardous wastes that may be delivered to an unregistered facility.
- Support of fire prevention and emergency response activities by identifying the locations of MRFs to allow prompt response to fires that may occur and to ensure that they have the proper fire suppression equipment.

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MRFs in Northern Virginia:
A limited number of recycling companies are used by Northern Virginia jurisdictions and the District of Columbia. Republic Services and Waste Connections American Recycling Center in Northern Virginia and Waste Management Elkridge Material Recycling Facility in Maryland that process principal recyclables generated within the region (paper, cardboard, plastic, cans, etc.). All of them are privately owned and therefore Northern Virginia jurisdictions are totally reliant on the private sector for recyclables recovery. There are other companies in the region that localities contract with for management of specific materials such as metals, electronics, and household hazardous waste. States offer public MRFs in addition to private options to maintain a level playing field for smaller haulers, and greater resiliency.

Benefits of Adding a Public Option:
Maryland operates MRFs that provide a public option for haulers. North Carolina and West Virginia are two more of the 31 states offering public MRF options. Public MRFs offer greater control for pricing and management and another option for independent haulers not affiliated with the three companies operating most private MRFs. Maryland Environmental Services offers a public model for the state that fared better during downturns and was able to pivot on new materials better than companies serving Northern Virginia. Having a public option in addition to our important private companies will improve the region’s resiliency for unforeseen contingencies. It will increase community flexibility to respond to material changes and shutdowns due to contamination and maintenance. Virginia should support the development of public and public private collaborations for materials recycling.

Bipartisan Infrastructure Framework:
Through the Bipartisan Infrastructure Law, $275 million has been allocated to the U.S. EPA to implement the Solid Waste Infrastructure for Recycling program. This program provides grants to implement a strategy to improve post-consumer materials management and infrastructure; support improvements to local post-consumer materials management and recycling programs; and assist local waste management authorities in making improvements to local waste management systems. States are eligible to apply for the grants and Virginia should explore this funding opportunity to support essential recycling infrastructure in the state.

Northern Virginia depends entirely on three privately MRFs for the 960,000+ tons of recyclables waste generated by the 921,684 households and 1.26 million jobs in the region.