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, they are sent to recyclables processing facilities known as Material Recovery Facilities or 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.

Virginia jurisdictions are responsible to plan waste disposal and recycle 15 to 25 percent of their solid waste by weight, 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 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).
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.

Notes:

Per Virginia Code §10.1-1411, jurisdictions or “Solid Waste Planning Units” (SWPUs) with populations above 100,000 are required to meet the 25 percent requirement and report quantities to DEQ each year. SWPUs or jurisdictions with fewer than 100,000 residents must recycle 15 percent of their solid waste and report to DEQ every four years.

NVWMB staff queried EPA Regional 3, who forwarded the query to a listserv of professional recyclers. 11 state environmental agencies responded: Arkansas, Connecticut, Delaware, Illinois, Massachusetts, Michigan, New Mexico, Rhode Island, South Carolina, Tennessee, and Wyoming.

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