

### 2.1.5 Material Recovery Facilities

The 2014 VDEQ database lists 16 permitted material recovery facilities (MRFs) in the Tidewater area. Table 8 lists the known active and proposed MRFs in the Tidewater area.

**Table 8. Material Recovery Facilities in the Tidewater Region**

Facility	Location	Operator
<b>Permitted Facilities</b>		
Bay Disposal Inc., MRF	Norfolk	Bay Disposal
Meeks Disposal Corporation Recycling Facility	Chesapeake	Meeks Disposal Corporation
Norfolk Naval Shipyard MRF	Portsmouth	US Navy
Clearfield MMG, Inc.	Chesapeake	Clearfield MMG, Inc.
Clearfield MMG, Inc.	Suffolk	Clearfield MMG, Inc.
SPSA Tire Processing Facility	Suffolk	Southeastern Public Service Authority
Tidewater Green Corporation MRF	Chesapeake	Tidewater Green Corp.
United Disposal Wellman Street	Norfolk	United Disposal
Virginia Materials, Inc	Norfolk	Virginia Materials, Inc
Waste Industries, LLC	Chesapeake	Waste Industries
Waterway Marine Terminal	Chesapeake	
Wheelabrator Portsmouth, Inc.	Portsmouth	Wheelabrator
Recycling & Disposal Solutions MRF	Portsmouth	Recycling & Disposal Solutions
TFC Recycling MRF	Chesapeake	Tidewater Fibre Corp
B & H Sales Corporation MRF	Norfolk	B & H Sales Corporation
Military Highway Recycling Center	Chesapeake	East Coast Gutterman, LLC
<b>Proposed Facilities</b>		
<u>Bay Disposal Inc., MRF</u>	<u>Town of Smithfield</u>	<u>Bay Disposal</u>

NOTE: Amends Page 22 of Plan

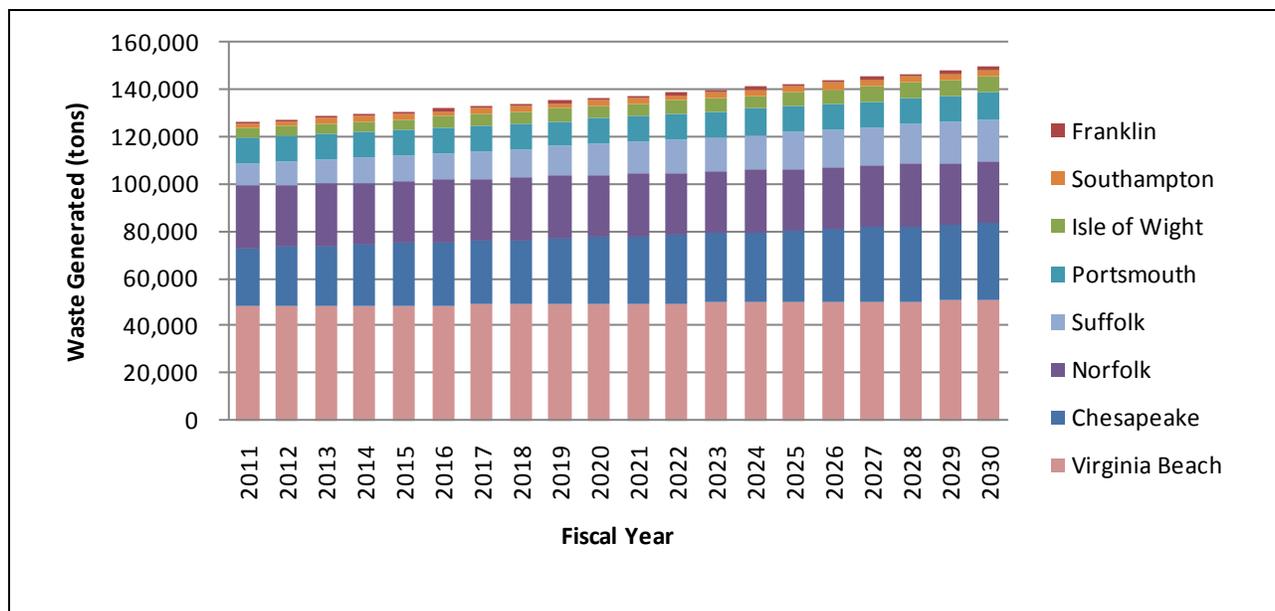
### 3.1.3 Construction and Demolition Debris

CDD consists of waste generated during construction, renovation, and demolition projects. The often bulky, heavy materials that make up CDD include wood, concrete, steel, brick, asphalt, gypsum, and plastic. CDD also includes salvaged building components such as doors, windows, and plumbing fixtures. Every time a building, road, or bridge is constructed, remodeled, or demolished, these materials are generated.

In addition, large volumes of CDD waste materials are generated during major storm events such as tropical storms and hurricanes. Historically, the region has experienced such storm events and has been forced to manage the resulting debris. The Region must plan and prepare for the management of large influxes of CDD in addition to the volumes of CDD waste that are generated as a result of normal construction and demolition activities within the area.

In 2003, EPA estimated that the per capita generation of building-related CDD materials was 3.2 pounds per person per day. This estimate was based on a series of calculations to estimate residential construction debris nonresidential construction debris, residential demolition debris, nonresidential demolition debris, and renovation/remodeling debris. EPA further estimated that 52 percent of CDD is disposed (i.e., 48 percent is recovered). In 1996, this per capita rate was estimated to be 2.8 pounds per person per day.

While not every person generates CDD materials personally, population growth increases the need for buildings and infrastructure to support that growth. Since little recovery of CDD appears to occur in the region and construction activity has declined, an average CDD disposal rate was used based on disposal studies conducted in California; Wisconsin; and King County, Washington. Forecasts of CDD disposal are provided in Figure 13, using a disposal average of 2.1 tons/person/year (1.16 pounds/person/day).



**Figure 13. Estimated CDD Generation for the Region**

The majority of CDD handled and disposed of in the Region is collected by the private sector. The active permitted private CDD only disposal facilities in the South Hampton Roads Region are shown in Table 17.

There are two active CDD-only disposal facilities in the Region with capacity that extend well into the current study planning period (through 2047). The City of Portsmouth’s landfill is intended for disposal of city produced CDD material only. The Centerville Turnpike CDD Landfill has a reported capacity of 5,400,000 tons (as of July 2015) with 13 years of life (VDEQ, June 2015) and is anticipated to be the only active CDD only disposal facility for the foreseeable future in the Region. The Higgeson-Buchanan Landfill has very little permitted capacity remaining and it is reported that the facility has at least temporarily stopped accepting waste. Although, it is possible that an expansion may be permitted and constructed in the near future.

The Elbow Road CDD landfill on Centerville Turnpike in Chesapeake has a permitted expansion, although there are no plans to construct the expansion area, according to the site owner (personnel communication with facility owner, Warren Thrasher). The expansion has a reported capacity of approximately 1.6 million cubic yards with an estimated life of 13 years (assuming a waste disposal rate of 125,000 cubic yards per year). The expansion area would cover a total area of 20.7 acres (15.3 acres plus 5.3 acres of piggyback).

**Figure 17. Active CDD and Industrial Landfills In Region**

Landfill	Facility Type	Total Remaining Permitted Capacity (Tons)	Waste Disposed (Tons)	Remaining Reported Permitted Life (Years)
City of Portsmouth Craney Island Landfill	CDD	800,201*	53,244*	17*
Higgerson Buchanan Landfill	CDD	32,705*	42,125*	1*
Centerville Turnpike CDD Landfill	CDD	5,400,000***	39,290*	13*
John C. Holland Enterprises Landfill (JCHEI)	Industrial	3,964,000**	5,573,000**	31**

\*From Solid Waste Managed in Virginia During Calendar Year 2009 (VDEQ June 2010)

\*\*Correspondence from JCHEI to HRPDC dated September 5, 2011

\*\*\*Correspondence Submitted to HRPDC dated June 12, 2015

Landfills that are permitted for other types of waste (either MSW or Industrial) may also accept CDD, although a CDD only disposal facility would most likely have a lower tipping fee, and therefore disposal of CDD in a MSW or Industrial landfill may not be considered cost effective since CDD waste would be replacing MSW or Industrial waste air space. Non-CDD only permitted landfills that may accept CDD waste include the SPSA Regional Landfill (MSW) as noted above, the City of Virginia Beach Landfill No. 2 (MSW) and the Holland Landfill (Industrial). According to the VDEQ (Solid Waste Managed in Virginia During Calendar Year 2009), the Holland Landfill has over 12 million tons of capacity with an reported remaining life of more than 50 years, which extends through the study planning period.

Active and permitted Material Recovery Facilities (MRFs) that recycle and otherwise handle CDD in the Region are; Waste Industries on Cook Blvd. in Chesapeake, Bay Disposal on East Indian River Road in Norfolk, Waterway Marine Terminal on Precon Drive in Chesapeake, United Disposal on Wellman Street in Norfolk and Meeks Disposal Corporation on Cavalier Boulevard in Chesapeake.

According to VDEQ records, Waterways Recycling processes approximately 50,000 tons of CDD material annually (calendar year 2007 data), at least some of it from out of the Region. According to the facility manager, the facility has the capacity to handle up to 700,000 tons annually, with a recycling rate of 92 percent. The remaining 8 percent of the material is disposed of most likely in the Centerville Turnpike CDD Landfill.

The International Paper – Franklin Mill Industrial Waste Landfill was previously considered a “captive” industrial landfill. As the Franklin Mill has been repurposed, separate corporations

will be operating facilities within the Mill. International Paper intends for businesses operation on the Mill site and generating similar wastes to dispose of that waste in the International Paper Industrial Waste Landfill. There is no intent to accept wastes from other locations and activities.

“East Coast Gutterman, LLC proposes to operate a material recovery facility for CDD in Chesapeake. This facility will have an initial design capacity of 200 tons/day.” The facility will accept, sort, and process construction and demolition debris (CDD) waste consisting primarily of steel, wood, shingles, sheetrock, concrete, and the like for recycling. The facility will include a concrete crushing operation. Recycled concrete and brick will be temporarily stockpiled on-site. Residual waste from the processing operation will be transferred from the facility to a permitted landfill or transfer station. The design capacity of the facility is 200 tons per day.

Bay Disposal, Inc. proposes to operate a material recovery facility in the Town of Smithfield, VA. The facility will accept, sort, and process municipal solid waste (MSW), construction and demolition debris (CDD), and recyclables. The design capacity of the facility is 400 tons per day.

**NOTE: Amends Page 51 of Plan**