AGENDA NOTE – HRPDC QUARTERLY COMMISSION MEETING

ITEM #6: REGIONAL SOLID WASTE MANAGEMENT PLAN FOR SOUTHEASTERN VIRGINIA

SUBJECT:
The HRPDC, with assistance from the Southeastern Public Service Authority of Virginia (SPSA), has completed the five year update to the *Regional Solid Waste Management Plan for Southeastern Virginia,* which covers the SPSA service area.

BACKGROUND:
The Virginia Solid Waste Planning and Recycling regulations require that designated solid waste management planning units develop and maintain the regional solid waste management plan and once every five years complete a plan update. These regulations also require annual reporting of recycling activities to serve as the basis for determining whether the region's localities are meeting the state's 25% recycling rate requirement.

The HRPDC is the designated solid waste planning agency for Southeastern Virginia which includes the cities of Chesapeake, Franklin, Norfolk, Portsmouth, Suffolk, and Virginia Beach, the counties of Isle of Wight and Southampton, and the towns of Boykins, Branchville, Capron, Courtland, Ivor, Newsoms, Smithfield and Windsor.

As required by DEQ regulations, the HRPDC held a public hearing on the Plan Update on July 1, 2015. The Plan has also been available for public review for thirty (30) days with the public comment period ending on July 16, 2015. No public comments have been received.

Mr. Randy Keaton, HRPDC Deputy Executive Director, will provide a brief overview of the Plan Update.

Attachment 6

NOTE: This Item will be presented for action under Consent Agenda Item #12-G

HAMPTON ROADS PDC
PLANNING DISTRICT COMMISSION

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July 17, 2015

Mr. Steve Coe
Virginia Department of Environmental Quality
Waste Management Program
629 East Main Street
P.O. Box 1105
Richmond, VA 23218

RE: Letter of Certification

Dear Mr. Coe:

As required by 9VAC20-130-175F, the Hampton Roads Planning District Commission (HRPDC) is submitting this letter, prior to the five-year anniversary of the plan approval date, to certify that the Regional Solid Waste Management Plan for Southeastern Virginia (SWMP) elements have been maintained and updated with respect to:

- Waste generation estimates
- Available 20-year waste management capacity
- Achievement of SWMP schedule increments

The HRPDC was designated as the Regional Solid Waste Planning Agency for the region in August, 2012. Southeastern Virginia Region (the Region) has continued to study the future of solid waste management for 2018 and beyond. The HRPDC contracted with SCS Engineers in 2010 to update the 2018 and Beyond Study. The update was completed in April, 2011 and a Solid Waste 2018 Technical Committee was formed to develop a new Use and Support Agreement. The Southeastern Public Service Authority of Virginia (SPSA) has recently received proposals from interested companies for alternative methods of disposal of solid waste in lieu of the Regional Landfill. SPSA is currently reviewing the proposals to determine the most appropriate and most economical method of disposal. A new Use and Support Agreement has also been drafted for review by the individual localities. The timeline for approval of the Use and Support Agreement and a decision on the disposal method for Post 2018 is October, 2015.

The SWMP has been maintained and has been amended four times since 2010 to accommodate changes in the solid waste system. The following provides a discussion of the above-listed bullet points.

WASTE GENERATION ESTIMATES

The Regional Solid Waste Management Plan (Plan) contains estimates for solid waste generation in the Region that range from .81 tons/person/year (for SPSA disposed waste excluding recycling) to .92 tons/person/year for "Total Waste," (i.e., waste disposed at SPSA and private facilities). It was further assumed that the waste generation rates would remain constant during the planning period. The HRPDC, in cooperation with SPSA, has re-evaluated waste generation within the Region and has developed a new waste generation rate based on 2014 data. For the purposes of this analysis, waste generation is defined as the sum of tons of solid waste disposed and recycled either through SPSA or municipal programs.

Waste disposal tonnages for the SPSA Regional Landfill, the Virginia Beach Landfill No. 2, and the City of Portsmouth construction, and demolition debris (CDD) Landfill are provided in Figure 1 for the years 2010 through 2014. Similarly, recycling quantities for both SPSA and its member communities are provided in Figure 2 for the years 2010 through 2014. The combined disposal and recycling tonnages are provided in Figure 3, which represents waste generation for the SPSA service area. The tonnages represented in the figures do not include waste or recyclables that are generated within the SPSA service area, but are disposed or otherwise managed by the private sector outside of the Region.

Waste generation rates were then developed by dividing the total waste generated (Figure 3) with population estimates for the SPSA member communities. The resultant waste generation rates are provided in Figure 4. The waste generation rate calculated in 2009 is higher than the rate used to estimate waste generation in the 2015 SWMP.

The 2014 estimated waste generation rate was combined with population projections for the Region to provide an estimate of waste generation for the 20-year planning period. By the end of the planning period, the SPSA Region will generate nearly 1.27 million tons of municipal solid waste:

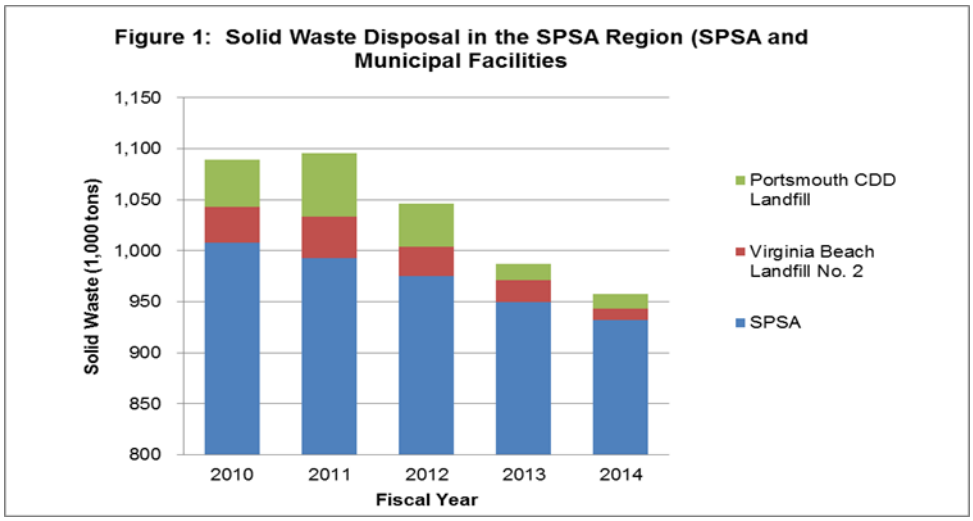
2015: 1,091,900 tons
2025: 1,176,500 tons
2035: 1,267,600 tons

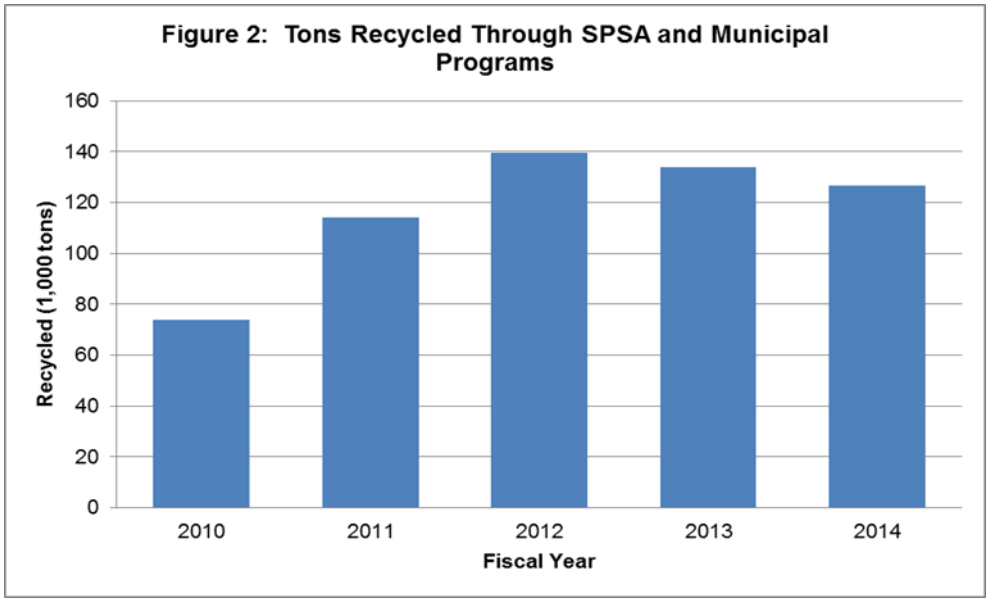
Waste generation estimates are presented graphically in Figure 5.

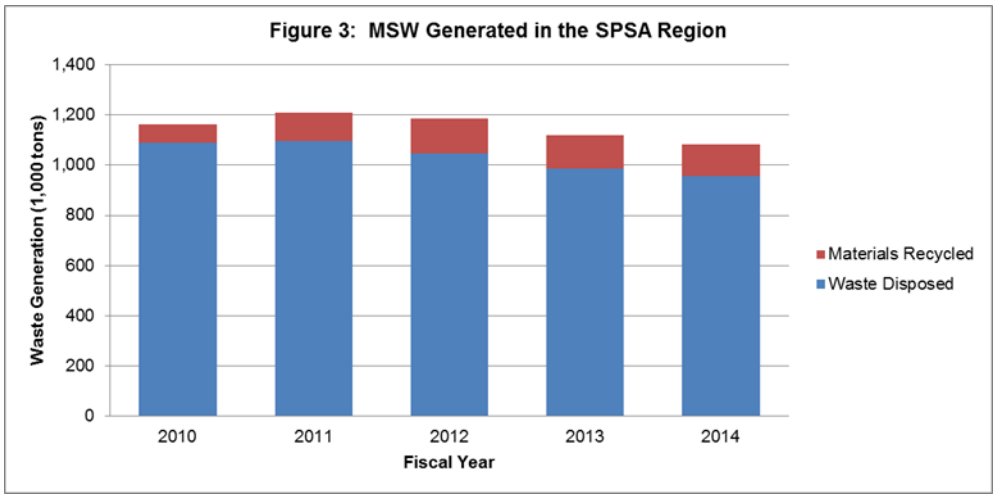
AVAILABLE WASTE MANAGEMENT CAPACITY

When the 2010 SWMP was written, it was envisioned that SPSA would not be the sole provider of solid waste disposal for the service area. The RDF WTE Facilities were sold to Wheelabrator in April 2010. Under the terms of the sale, Wheelabrator will accept and process SPSA member community municipal solid waste. Ash generated by the facility was disposed of at the Virginia Beach Landfill No. 2 (until 2011). Since August 2011, ash is taken to the Regional Landfill located in Suffolk, Virginia and operated by SPSA. The non-processible waste, which previously had been disposed of in the SPSA Regional Landfill, is

now being taken by Wheelabrator to landfills that are located outside of the SPSA service area (see Figure 6).



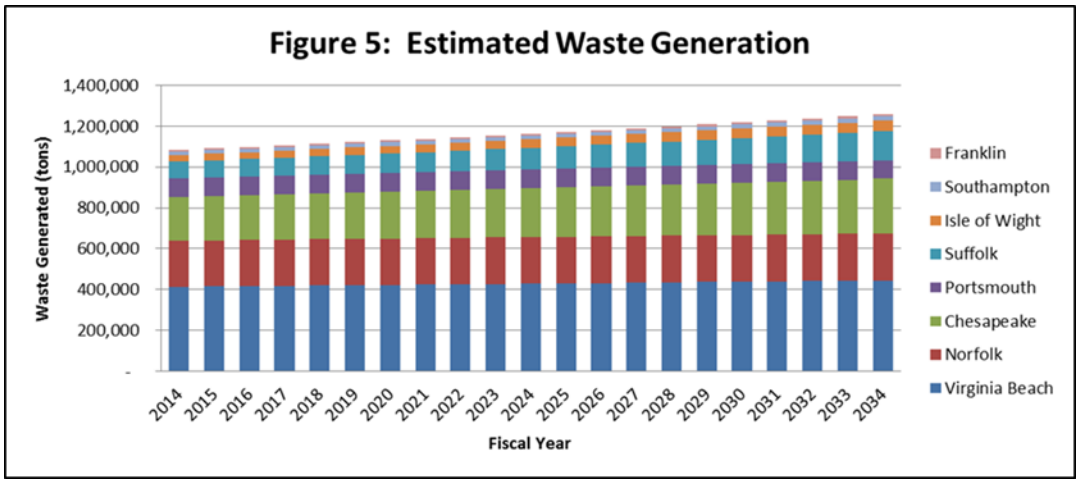




Attachment 6

Figure 4: Municipal Solid Waste Generation Rates

Fiscal Year	Waste Generated (1,000 tons)	Estimated Population	Waste Generation Rate (tons/person/year)
2010	1,128	1,145,548	0.98
2011	1,173	1,156,040	1.01
2012	1,185	1,169,112	1.01
2013	1,121	1,177,688	0.95
2014	1,084	1,183,607	0.92

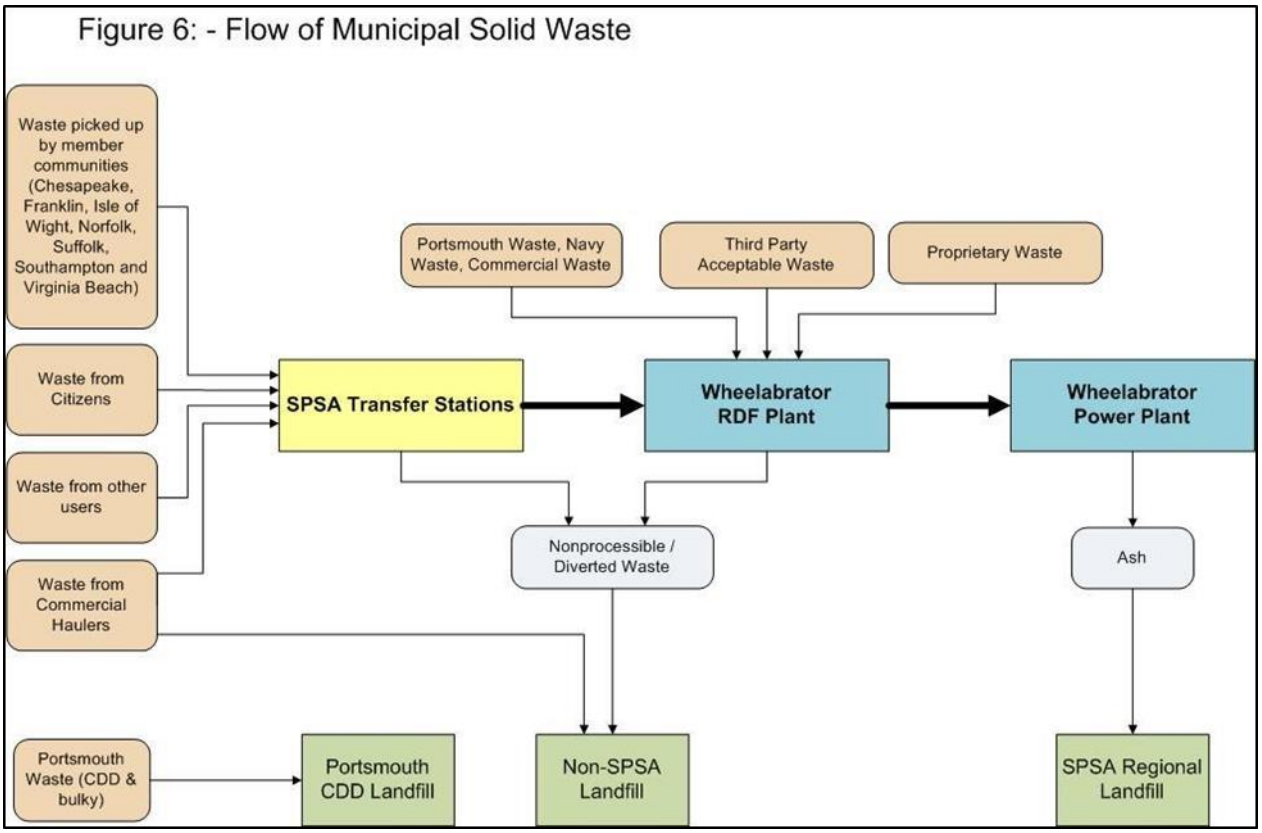


The service agreement requires Wheelabrator to accept SPSA member waste until January 24, 2018.

Assuming Wheelabrator maintains the WTE RDF Facilities so it can be operated at capacity, the RDF plant will continue to provide long-term disposal capacity for the Region well into the future. Several privately owned and operated municipal solid waste landfills are located in Eastern Virginia that could provide disposal capacity for the Region's non-processible waste. For example, at the end of 2013, the Bethel Landfill had more than 24 million tons and 76.3 years of remaining capacity.[1]

With the diversion of non-processible wastes from the SPSA Regional Landfill, SPSA projects that the anticipated remaining disposal capacity of Cell VI of the SPSA Regional Landfill will now extend beyond 2018; providing sufficient capacity for disposal. On June 8, 2011, the Virginia Department of Environmental Quality issued amended Permit#417 for Cell VII expansion of the SPSA Regional Landfill in Suffolk, whereby adding an additional 56 acres of lined disposal area to the Regional Landfill. It is also anticipated that the Virginia Beach Landfill No. 2 and the City of Portsmouth CDD Landfill both will have potential capacity for the 20-year planning period.

[1] This disposal capacity estimate does not account for acceptance of non-processible waste from the SPSA region. Source: Solid Waste Managed in Virginia During Calendar Year 2013, Virginia Department of Environmental Quality, June 2014.



PLAN SCHEDULE INCREMENTS

The 2010 SWMP provides a timeline for the development of several new facilities for the solid waste system. The following provides an overview of the alternatives that were considered and an update on the Region's progress in implementing these alternatives. In addition, the HRPDC sponsored a study in 2011 which updated the evaluation of institutional, organizational, technology, and disposal options for managing waste in the region after 2018, when the Use and Support Agreements between the SPSA Region members expire.[2] The findings from the HRPDC study are still being considered by the Region.

Planning for a new regional landfill: The sale of the RDF plant and subsequent transfer of non-processible waste to a private landfill located outside of the SPSA Region has reduced the immediate need for a new regional landfill; however, long-term planning for future disposal will still be pursued by the Region members, either cooperatively or independently after 2018.

New transfer stations: The 2010 SWMP identified the need for three new transfer stations in the Region. However, except for the Chesapeake facility, all transfer stations are operating at or below their design capacity.

[2] SCS Engineers, Final Report, Solid Waste Management for Southside Hampton Roads, Planning Horizon 2011-2047, Prepared for the Hampton Roads Planning District Commission, October 6, 2011.

Yard waste facility: SPSA has operated facilities where yard waste collected by member communities was handled, mulched and composted. Yard waste was transported by SPSA from member collection points to the yard waste management facility at the Virginia Beach Landfill No. 2. This facility was closed in 2007 to address neighbor complaints of excess odors from the facility. The Region does not currently have a facility dedicated to handling and processing yard waste, although several member communities are in the process of implementing programs to beneficially reuse the yard waste that they collect (see Figure 7).

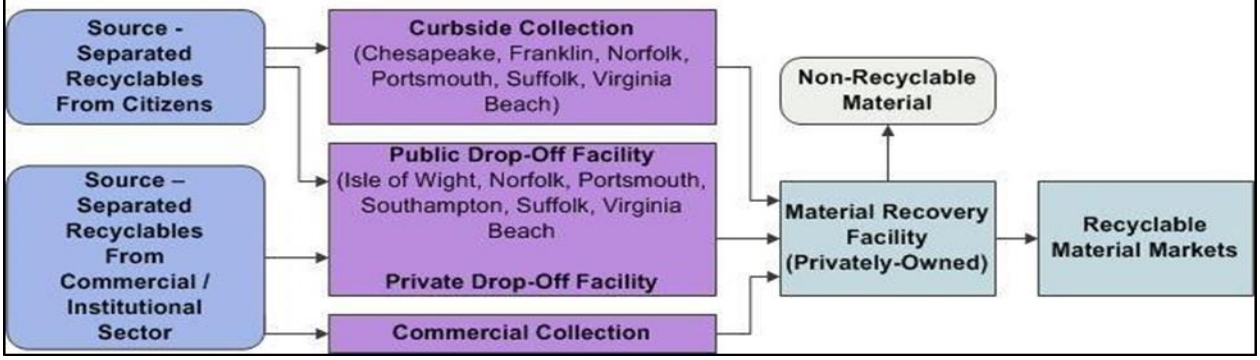
Evaluate Materials Recovery Facility: Currently there are eleven Materials Recovery Facilities (MRF) in the Region that are capable of processing materials collected from various recycling programs. SPSA discontinued recycling services in 2010 and the member communities have taken over the responsibility for collection of recyclables (see Figure 8).

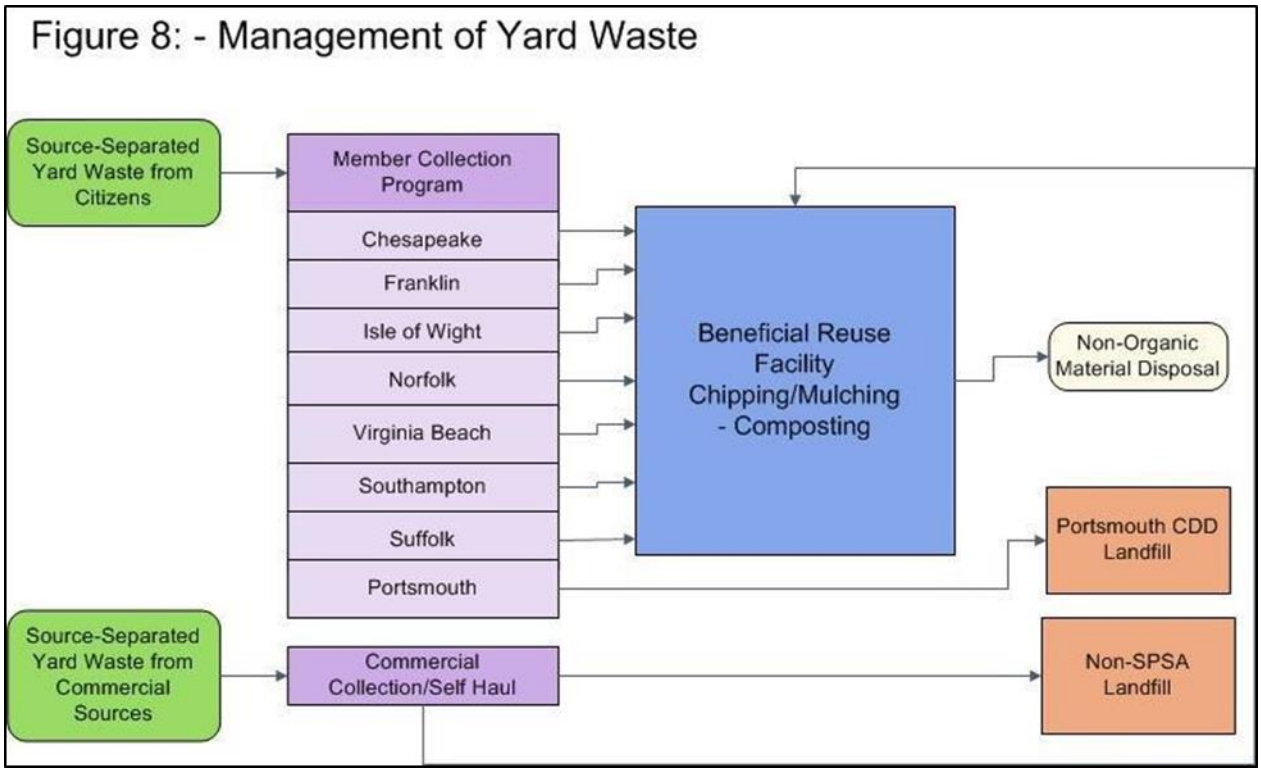
Evaluate new construction and demolition debris (CDD) landfill: The 2010 SWMP recommended the evaluation of various methods for managing CDD. However, the majority of CDD that is handled and disposed of in the Region is collected by the private sector. The primary concern at the writing of the 2010 SWMP was providing an outlet for storm debris. Due to changes in the disposal of non-processible waste, and the existing private CDD landfills in the Region, there should be sufficient capacity for the management of municipally collected CDD.

Continue Household Hazardous Waste (HHW) collection program: SPSA continues to operate a regional HHW collection program through three collection facilities. One facility is open on a full-time basis; the remaining two are open based on a monthly recurring schedule. The cities of Norfolk and Virginia Beach and Isle of Wight County operate their own HHW program to serve their residents.

Continue operation of the Virginia Beach Landfill No. 2: This landfill is owned by the City of Virginia Beach and continues to remain in operation. The landfill discontinued the acceptance of ash from the RDF plant in August 2011.

Figure 7: - Management of Recyclables





CLOSING

Even with changes in the solid waste management system and increased waste generation, there appears to be sufficient municipally-owned or privately-owned capacity to effectively manage the Region's waste stream. Furthermore, SPSA has maintained and implemented several aspects of the 2010 SWMP. Other alternatives are still under evaluation or have been negated due to changes in disposal practices. The HRPDC updated the overall regional solid waste plan document in 2013 to incorporate the previous amendments to the plan and update other demographic, facility, management, and waste flow information.

Should you need additional information, do not hesitate to contact me.

Sincerely,

Robert Crum
Executive Director

JBH/jc