

Seattle Public Utilities – Solid Waste

Overview of Facilities and Programs

Seattle Public Utilities (SPU) is responsible for the collection and disposal of solid waste generated within the City of Seattle. The City-owned infrastructure used to accomplish this task consists of two recycling and disposal stations, two household hazardous waste facilities, and a fleet of trucks and heavy equipment. In addition, the Solid Waste Capital Improvement Plan (CIP) supports post-closure projects on two landfills previously used by the City.

The City's solid waste collection system consists of the South Recycling and Disposal Station, located in the South Park area of the city, and the North Recycling and Disposal Station, located just north of the Lake Washington Ship Canal at Stone Way. The South Household Hazardous Waste facility is located on the same site as the SRDS, while the North Household Hazardous Waste facility is located at 125th Street North, adjacent to the City-owned Haller Lake shops.

Private contractors collect household refuse and recyclables and deliver the waste to the recycling and disposal stations for its ultimate disposal. Private contractors also collect the City's commercial waste and deliver some of that waste to the City's recycling and disposal stations. Self-haulers, private individuals, and small contractors can also deliver their own refuse to the stations. Once deposited at a station, the trash is processed through a large compaction machine and placed in a sealed shipping container. This container is hauled by solid waste fleet trucks to the Union Pacific Railhead where it is placed on a train. Six times a week, the trains carry the loaded containers to a privately-owned regional landfill in Eastern Oregon, where final disposal is accomplished. The trains return with empty containers to be refilled. Self-haulers may also bring their recyclables to the recycling and disposal stations. Materials are separated by the customer and placed in large bins. Once the bins are full, Solid Waste Field Operations personnel haul these bins to private recyclers for processing. Large goods (refrigerators, stoves, etc.) may also be brought to the stations for recycling. Customers can also bring unused pesticides, paints, and solvents to one of the two household hazardous waste sites. The City contracts with a private company to pick up and dispose of these materials. Seattle Public Utilities maintains a list of materials that are still useable and makes these items available to anyone who wants them.

The CIP is funded through Solid Waste rates and revenue bonds. Overhead costs for the CIP (such as rent and utilities) are currently budgeted in SPU's operating budget and then repaid as CIP expenditures are incurred.

Highlights

- ◆ **Facilities Master Plan Implementation:** This project implements the Solid Waste CIP Facilities Master Plan. The plan, which guides the construction of facilities that provide the citizens of Seattle with sufficient recycling and solid waste services for the next 30 years, sets objectives and defines options for replacing or rehabilitating the City's solid waste transfer stations and household hazardous waste sheds; constructs a regional, intermodal facility; conducts cost and feasibility analyses of facility options; and determines a preferred approach to implementation. The scope, schedule, and costs of proposed projects are further defined following preliminary engineering and completion of a State Supplemental Environmental Impact Statement (SEIS). Costs include completion of the SEIS, permitting, property acquisition, design, construction, and purchase of facility equipment.
- ◆ **Midway Landfill Post-Closure Improvements:** This project funds post-closure operations, maintenance, and capital improvements at the Midway Landfill, which SPU operated from 1966 to 1983. The landfill is a 50-acre former gravel quarry located adjacent to Interstate 5 in Kent, Washington. The Washington State Department of Transportation (WSDOT) is widening Interstate 5 by two lanes on the west side. This state project affects SPU's post-closure infrastructure currently in place on the WSDOT right-of-way, and necessitates the removal of refuse buried in the right-of-way. SPU and WSDOT are working together on this project, which enters the construction phase in 2007 if WSDOT obtains funding.

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Project Selection Process

SPU has adopted an Asset Management approach for selecting which projects to build. This is a triple bottom line approach in which projects are evaluated on their economic, social and environmental benefits and their ability to meet customer service levels. The approach provides an elaborate analytical and modeling framework to find the most economic balance between capital investments and operation and maintenance expenditures so as to minimize life cycle costs of any facility.

A committee of senior SPU executives, the Asset Management Committee (AMC), reviews each project valued at \$250,000 or more and assures that only projects that meet the benefit criteria move forward. Several projects have been dropped, as their costs were higher than their benefits. Several cost-effective master planning efforts were approved to create up-to-date improvement and upgrade plans for various groups of assets. Other projects have been expanded or expedited because their benefits exceeded their costs.

Program Category Summaries

The Solid Waste CIP appropriates \$12.8 million in 2006 (including Technology projects funded by the Solid Waste Fund, displayed in a separate section of this CIP). It is comprised of four program categories as summarized below.

New Facilities: This program plans, designs, and constructs new facilities to enhance solid waste operations. In 2006, SPU begins to implement its Solid Waste Facilities Master Plan.

Rehabilitation and Heavy Equipment: This program designs and constructs projects to repair and/or upgrade solid waste facilities and replaces aged heavy equipment.

Shared Cost Projects: This program includes capital improvement projects that receive funding from multiple SPU funds. In 2006 the program includes funding for facility improvements, the SPU Operations Control Center Upgrade, and a Utility Payment Center.

Technology: This program makes use of recent technology advances to increase efficiency and productivity. Solid Waste-supported technology projects are shown grouped with other technology projects in the SPU Technology CIP section.

Anticipated Operating Expenses Associated with Capital Facilities Projects

For most projects in the Solid Waste CIP, there are minimal new 2006 operations and maintenance costs, or these costs have not been calculated (N/C). In these cases, the cost impacts of the projects are either insignificant or offset by cost savings realized by other projects.