

# 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 (SRDS), 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 near 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 North 125th Street, 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 Solid Waste 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:** The Solid Waste Facilities Master Plan guides the construction of facilities that provide the citizens of Seattle with sufficient recycling and solid waste services for the next 30 years. In 2008, this project is broken down into two separate projects: the North Transfer Station Rebuild and the South Transfer Station Rebuild. Investments in these facilities will modernize solid waste operations, enhance worker safety, and allow for greater recycling opportunities as Seattle pursues aggressive new waste reduction strategies to minimize waste the City collects and disposes. Costs include Environmental Policy Act (SEPA) evaluations, permitting, property acquisition, design, construction, and purchase of facility equipment.

**Midway Landfill Post-Closure Improvements:** This project conducts post-closure capital improvements at the Midway Landfill, a 50-acre former gravel quarry located in Kent, Washington and operated by SPU from 1966 to 1983. The Washington State Department of Transportation (WSDOT) is undertaking a billion dollar project to widen Interstate 5 by two lanes on the west side. This state project impacts landfill post-closure infrastructure that is currently in place on the WSDOT right-of-way, and also requires SPU to remove refuse buried in the right-of-way. Project costs may change depending on negotiations underway between SPU and WSDOT. SPU and WSDOT are working together on this project, which enters the construction phase in 2010, if WSDOT obtains

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funding for its highway project. The funding decision is included in the state Regional Transportation Investment District (RTID) ballot measure in November 2007.

## 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 costs and benefits, as well as the 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.

The Asset Management Committee, a committee of senior SPU executives, 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 have been approved to create up-to-date improvement and upgrade plans for various groups of assets. Other projects have been expanded or expedited because the benefits exceed the costs.

## Program Category Summaries

The Solid Waste Proposed CIP totals approximately \$11.4 million in 2008 (including Technology projects funded by the Solid Waste Fund, displayed in a separate section of this CIP), or \$35.3 million lower than the 2008 Endorsed Budget. In the New Facilities BCL, the 2008 budget for the South Park Development project is lower by \$8.1 million but the total project costs remain relatively unchanged. Also, the joint Executive-Council decision to avoid building the intermodal third station reduces the 2008 budget by \$28 million. In the Rehabilitation and Heavy Equipment BCL, the budget is about \$1 million lower than the Endorsed due to a shift of heavy equipment purchases to the Shared Cost Projects BCL, and an efficiency reduction for the Midway Flare Improvements project.

The Solid Waste CIP is composed of four program categories, which are summarized below.

**New Facilities:** This program plans, designs, and constructs new facilities to enhance solid waste operations. In 2008, SPU continues implementation of its Solid Waste Facilities Master Plan, which features a two-station configuration.

**Rehabilitation and Heavy Equipment:** This program designs and constructs projects to repair and/or upgrade solid waste facilities.

**Shared Cost Projects:** This program includes capital improvement projects that receive funding from multiple SPU funds. In 2008 the program includes funding for Operational Facility improvements, the Operations Control Center Upgrade, Security Improvements, and Heavy Equipment Purchases.

**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

When appropriate, the projects in the Solid Waste Fund CIP include operations and maintenance cost estimates. These estimates will be refined after project completion and will be included as part of SPU's future O&M Proposed Budget submittals.