

# 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. To fulfill this responsibility the City owns 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 near Stone Way. The South Household Hazardous Waste facility is located on the same site as the South Station, 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 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.

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

- **South Transfer Station Rebuild:** This project will replace the existing solid waste transfer station, which was built in 1966. The existing station is outdated and nearing the end of its useful life. The design and construction of replacement facilities include demolition of existing structures, excavation and removal of contaminated soil, backfill with clean soil, clean-up of the bus yard, re-alignment of a subsurface storm drain pipe to the perimeter of the site, demolition of the new recycling and reuse facilities, a household hazardous waste facility, and other utility facilities.
- **North Transfer Station Rebuild:** This project will replace the existing North Recycling and Disposal Station which was built in 1967. The existing station is outdated and nearing the end of its useful life. The design and construction of the new facility includes the demolition of the existing transfer station, demolition of a warehouse building, new administrative building, employee facilities, recycling facilities, and other utility facilities. It also includes upgrading the parking lot for station parking. These two projects provide essential facilities for solid waste management in the City and enhance the recycling capability. It also provides the citizens of Seattle with sufficient recycling and solid waste services. Costs for both rebuilds include State Environmental Policy Act (SEPA) evaluations, permitting, property acquisition, design, construction, and purchase of facility equipment.

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## Project Selection Process

SPU has adopted an asset management methodology for selecting projects to build. This triple bottom line approach includes an in-depth analysis of the project's economic, social, and environmental benefits, and the ability to meet customer service levels. Using this approach, SPU has established a consistent analytical and modeling framework to achieve the most economical balance between capital investments and operation and maintenance expenditures to minimize the life cycle costs of any capital asset.

The Asset Management Committee (AMC), a committee of senior SPU executives, reviews each project above a certain cost threshold – recently increased to \$1 million from \$250,000 – to insure that only projects that minimize lifecycle costs and meet triple-bottom-line criteria move forward. As a result of this analysis, several projects have been dropped when costs far exceed the benefits. Several cost-effective master planning efforts were approved to create up-to-date improvement and/or upgrade plans for several groups of assets. Other projects have been expanded or expedited because the benefits exceed the costs.

## Program Category Summaries

The Adopted 2010 Solid Waste CIP totals approximately \$33.9 million (including Technology projects funded by the Solid Waste Fund, displayed in a separate section of this CIP). This is \$23.2 million less than the prior CIP largely due to delays in the transfer station rebuilds.

In the New Facilities Budget Control Level (BCL), the 2010 Adopted CIP is \$23.0 million lower than the prior CIP. This is mainly due to delays in the South Transfer Station Rebuild project, which required additional site preparation work required at the Bus Yard site. This work delayed the start of design and construction for approximately one and a half years. The North Transfer Station Rebuild project was increased slightly to support additional public outreach activities, preliminary engineering design work, preparation of a request for proposals for a design-build contractor, and review of submitted proposals. The South Park Development project's construction phase has been delayed to provide additional time to finalize pending cost-sharing agreements with potentially liable parties.

In the Rehabilitation and Heavy Equipment BCL, the 2010 Adopted CIP is \$0.4 million higher than the prior CIP due to changes in the conditions for the Kent Highlands Flare Improvements project. Recent modifications increased the useful life of the flares, moving replacement back to 2010.

In the Shared Cost Projects BCL, the 2010 Adopted CIP is \$0.2 million lower than the prior CIP due a delay in Operational Facility Construction to 2013.

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 2010, SPU continues the implementation of its Solid Waste Facilities Master Plan.

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

**Shared Cost Projects:** This program includes individual capital improvement projects which typically benefit multiple Lines of Business (e.g., the water line of business and the drainage and wastewater line of business) and whose costs are "shared," or paid for, by more than one of SPU's utility funds. In 2010 the funding from the Solid Waste Fund includes money for the Operations Control Center Upgrade, Security Improvements, and Heavy Equipment Purchases.

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**Technology:** This program makes use of recent technology advances to increase efficiency and productivity in addition to replacing vital systems that will no longer be supported beyond 2010. This program also includes Solid Waste portion of shared fund technology projects.

### **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 are refined after project completion and are included as part of SPU's budget.

### **City Council Provisos to the CIP**

There are no Council provisos.