

Solid Waste Interjurisdictional Technical Staff Work Group
June 20, 2007
King Street Center
Approved

Meeting Attendees:

City Staff:

Sharon Hlavka – City of Auburn
Tom Spille – City of Bellevue
Debbie Anspaugh – City of Bothell
David Steen – City of Des Moines
Rob Van Orsow – City of Federal Way
John MacGillivray – City of Kirkland
Stacey Breskin-Aver – City of Redmond
Linda Knight – City of Renton
Desmond Machuca – City of SeaTac
Amy Ensminger – City of Woodinville

County Staff:

Gemma Alexander – SWD
Jennifer Broadus – SWD
Jane Gateley – SWD
Shirley Jurgensen -SWD
Kevin Kiernan – SWD
Josh Marx – SWD
Bob Tocarciuc – SWD
Diane Yates – SWD
Mike Reed – Council Staff

I. Review Agenda and Minutes

Everyone present introduced themselves.

The May 23 minutes were approved as submitted.

II. SWD Updates

Engineering Services Manager Kevin Kiernan reported that division staff will attend tonight's Suburban Cities Association (SCA) meeting to answer questions on the Conversion Technologies Study findings.

King County will be moving to a new email domain name. The old web address metrokc.gov will be replaced with kingcounty.gov.

Department of Natural Resources and Parks Director Pam Bissonnette is retiring. In July, Solid Waste Division Director Theresa Jennings will become the acting Department Director. Kevin Kiernan will be the interim Director for the Solid Waste Division and Shirley Jurgensen will be the interim Engineering Services Manager. Kiernan will continue to attend Metropolitan Solid Waste Management Advisory Committee (MSWMAC) meetings, but may not attend all ITSG meetings.

Solid Waste Division staff Josh Marx announced that the City of Seattle is organizing a tour of the City of Bellingham's food waste curbside collection service. The tour will take place either July 31st or August 1st. Anyone interested in attending the all day tour should RSVP to Josh Marx by Friday June 22nd to reserve a spot.

III. Draft Conversion Technologies Report: Discussion

Kiernan reported that the draft Conversion Technologies Report has been circulated. Kiernan discussed a few of the major findings of the report, and asked ITSG members for their questions and comments.

Cost data information

One of the findings to keep in mind is that there has not been a facility of this type built in the United States for some time. R.W. Beck used the best available cost data which resulted in a capital cost of approximately half a billion dollars. Detailed cost information can be found in section 15. Cost information is presented in net present value.

Market value of energy and the many variables in the energy industry

The operating cost of a waste conversion facility is higher than the cost to export waste. The revenue generated by the sale of energy may offset some of the costs. R.W. Beck forecast the market value of energy for the period of study. The study assumes energy will be sold at market rate. ITSG members discussed today's energy market and assumptions regarding the future market. There was also discussion about whether there was any risk of producing an energy product that couldn't be sold.

Kiernan noted that there is a question of whether this technology is "Green Power" or not. There are advocacy groups that are working on getting conversion technologies classified as "Green," but that classification has not been achieved yet.

Disposal rates

ITSG discussed the disposal cost and the per ton rate increase. Kiernan noted that the lowest cost for conversion technology - excluding energy revenues to offset the cost - is \$62 per ton. Kiernan also confirmed that the Executive has committed to keep solid waste rates at or below the rate of inflation until the closure of the landfill.

Disposal rates with conversion technologies depend upon both the initial capital investment and the variables of the energy market. Kiernan noted the second paragraph in the Executive Summary on page 8 which states:

"The development of detailed construction cost estimates for three Conversion Technologies and the Waste Export Disposal Option was well beyond the scope of this report. Such estimates would require three to six months to develop and would cost well in excess of \$100,000 to prepare.

It is important to recognize that the NPV (net present value) is not an estimate of the actual cost to the County of each disposal option; it is an estimate of the value of the option considering the time value of money. Further discussion of the concepts and limitations of this analysis is included in Section 15 of this report."

Net present value is the estimate of costs over the 20 year study period, stated in today's dollars.

Emissions and toxicity of pollutants:

There are 3 different types of emissions from conversion technology: criteria pollutants, air toxics, and greenhouse gas emissions (GHG). Both technologies meet the regulatory requirements for these types of emissions. However, landfilling scores are slightly better

for criteria pollutants and greenhouse gas emissions, while conversion technologies have slightly better results for toxics.

Kiernan stated that current conversion technology does meet air quality standards. ITSG discussed changing standards in the region and public concerns about safety and public health. Regulations would have to be met for the Health Department to permit a conversion facility. Kiernan noted that these facilities are complex and that continuous monitoring would be part of its operation. ITSG member Tom Spille suggested that the monitor system for this facility could be made available online for other cities to monitor as well.

Impacts on recycling programs:

ITSG members discussed the impacts of conversion technology facilities on recycling programs. Kiernan stated that the program would have to be well defined because that would impact the size of a facility that was constructed. R.W. Beck used a 43 percent recycling rate for its analysis. They determined that conversion technology would be compatible with recycling until a recycling rate of 60-70 percent was reached.

ITSG discussed potential impacts on a conversion technology facility if the recycling rate did significantly increase. ITSG member Rob Van Orsow stated that it was his understanding that most contracts for conversion technology facilities contain “Put or Pay” language that would provide for penalties to be assessed if tonnage did not meet contractual requirements. It was also suggested that waste from other jurisdictions could ensure required tonnage levels.

Some waste cannot be disposed of in a conversion facility and would have to be landfilled, such as asbestos. Everything that is currently accepted at the curbside can be processed by a waste to energy facility.

The conversion process produces fly ash and bottom ash. Fly ash is a hazardous waste by itself, but mixed with bottom ash it becomes stabilized and diluted. This ash could be shipped by rail for landfilling.

The group discussed product stewardship and the responsibilities of manufacturers towards waste reduction in less packaging. Concern was expressed that a conversion facility could impact efforts to increase waste reduction/recycling and product stewardship.

Siting

R.W. Beck did not look at potential sites for a conversion facility. It was noted that the land requirement for a conversion technology facility is closer to 20 or 30 acres, not the 50 initially mentioned. In response to a question about the division’s Fisher Flour Mill property as a potential site for a facility, Kiernan said the siting process agreed upon in the Transfer and Waste Export System Plan would have to be followed to evaluate whether that would be a possibility.

ITSG discussed that the residuals from the conversion process would still need to be exported and whether or not a conversion technology facility would negate the need for

transfer stations. The report states in chapter 13 that the technology is compatible with King County's plans for the development of the transfer system and waste export plan.

Impacts of conversion technology on Cedar Hill Landfill closure:

Kiernan said that the division is working on several options for extending the life of Cedar Hills, including partial early export.

Van Orsow asked how extending the life of the Cedar Hills landfill would affect the value of technology. Kiernan responded that it would be neutral but that it could push back the need for a decision.

Other questions/comments of note for the consultants or for future study were:

- The ability to sell energy at market rates
- Barriers to entering the energy market
- Validity of energy assumptions, and the resulting net value of the energy product
- Siting and the permitting process
- Clarification on the study period, 2016 or 2013 end date, and
- What a conversion technology facility's impact would be on the region's streams and rivers.

The conversion technology report was developed in response to a budget proviso mandated by the council. The proviso provided for the advisory committees to review the report and encouraged the committees to submit comments on it. The report is not a decision making document and does not contain recommendations. The final report will be transmitted to council the end of July.

City members of ITSG discussed the possibility of cities not adopting the updated Comp Plan if it includes plans for a conversion technology facility.

Next Steps

The next ITSG meeting is scheduled for June 28th.