

Solid Waste Interjurisdictional Technical Staff Work Group
April 25, 2007
King Street Center

Meeting Attendees:

City Staff:

Kathleen Edman – City of Auburn
Sharon Hlavka- City of Auburn
Tom Spille – City of Bellevue
Debbie Anspaugh – City of Bothell
Rob Van Orsow – City of Federal Way
Erin Leonhart – City of Kirkland
Kristn McArthur – City of Redmond
Linda Knight – City of Renton
Amy Ensminger – City of Woodinville
Desmond Machuca – City of SeaTac

County Staff:

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

I. Review Agenda and Minutes

Everyone present introduced themselves.

The March 28 minutes were approved as submitted.

II. Updates

Waste to Energy

Intergovernmental Staff Liaison Diane Yates reported that the Public Issues Committee (PIC) of the Suburban Cities Association (SCA) unanimously voted to support the division's rate proposal. The PIC recommendation was passed by the Executive Committee of the SCA, and the Executive and County Council were notified on Monday.

The rate proposal was scheduled to be on the Operating Budget Committee today, but it has been rescheduled to the June 13 agenda. The ITSG legislation has been scheduled for discussion at the May 9 Regional Policy Committee (PRC) meeting. RPC will meet the third party review consultant at that meeting as well. SWAC has moved its May meeting to the morning of May 11 in order to meet with the third party review consultant.

The third party review is expected to be completed in July. The consultant team does not include local expertise but a railroad consultant has been added. Cities will have a chance to review the Scope of Work before meeting with the consultants at MSWMAC's May meeting.

Kiernan said the division has completed negotiations on the landfill gas-to-energy contract. The new contract will change the product from electricity to pipeline gas. The new contract will increase revenue to King County by about \$14 million over twenty years, and grants the county all emissions credits. Finally, the schedule is now simpler and more enforceable. The contract does not require the division to make any changes to the operation of the landfill to produce more gas. The primary purpose of the gas collection system is environmental protection, and the division will retain full control of the system. There will be an onsite meeting with the contractor next week.

Waste to Energy (WTE)

Kiernan presented the preliminary results of the consultants' waste to energy study. He said the study is not complete and the consultants have not yet written the presentation they will give at MSMWAC, so there may be some additional information by the time of that meeting.

The proviso called for a study of feasible conversion technologies. Feasible was defined in the Scope of Work as capable of handling the quantity and composition of waste generated in King County, producing energy while meeting current regulations and producing byproducts that can be disposed of practically. Using these criteria, the consultants have identified three feasible technologies: refuse derived fuel, mass burn and advanced thermal recycling. These three technologies are very similar in their core process, but vary in their preprocessing needs and back-end processes. Councilmember Lambert is interested in advanced thermal recycling.

The consultants are looking at the relationship between these technologies and recycling. There does not appear to be any conflict until recycling rates reach sixty to seventy percent, at which point, some of the materials that are needed to burn begin to be removed from the waste stream. Recycling will reduce the amount of material which must be handled by these facilities.

Cost information is not a measure of feasibility as defined by the study, however, it will be a very important consideration in practice. Cost information will be included in the study, and the advisory groups will be asked for input on how much cost is practically feasible.

Tom Spille of Bellevue commented that any additional cost would have to be balanced by significant gains in other arenas, such as environmental performance.

Under a waste to energy system, ten to twenty percent of the waste stream by weight will become residual ash. In some places beneficial uses are found for ash, but in Washington state current law requires that ash be disposed in a landfill. This means that a waste to energy system will still need an intermodal facility and waste export system, although much smaller than if all waste were exported.

Transfer stations are also a necessary part of a waste to energy system. All three technologies could handle the county's waste with a single facility. This facility could share a site with a transfer station, although this would add to the cost of the facility, and other transfer stations in the system would be unaffected.

All three technologies meet air emissions standards. A major concern about incineration in the 1980's was the release of dioxins, which is not a problem in these newer systems. Comparing their performance relative to landfilling is complex. The science comparing greenhouse gas emissions is unclear, and is complicated by the application of Kyoto protocol standards, which distinguish between carbon released from biogenic and anthropogenic sources. Biogenic carbon comes from decomposition of organic materials such as plants, and is not counted towards Kyoto Protocol emissions calculations.

Anthropogenic carbon sources are those produced by humans, such as carbon released from burning plastics, and these do count under the Kyoto Protocol. The Kyoto Protocol measures emissions that are released over a 100 year period. Further, research done to date on landfill contributions to methane emissions is based on large assumptions and non-replicated data. These assumptions may not be applicable to sites under consideration. The consultants have been instructed that if data available does not support quantitative calculations, they should instead qualitative findings. As a result, the study may not be as definitive as many people would like.

WTE releases both biogenic and anthropogenic carbon. Landfills only convert biogenic carbon, and much of the carbon landfilled is sequestered during the 100 years under consideration by the Kyoto Protocol. However, the carbon released from a landfill is often in the form of methane, which is 23 times worse as a greenhouse gas than carbon dioxide. It is possible to measure how much of that gas is captured, but not how much of it escapes.

For planning purposes, we can assume that landfilling would only take place where methane collection and landfill gas-to-energy systems are in place. The division would require these things in any contract for exporting waste, and all of the potential landfills in Eastern Washington and Oregon currently have or will have these systems by the time of Cedar Hills' closure. The study will also assume that a WTE facility would be located inside the Urban Growth Boundary in King County.

The committees will be briefed on the findings of the study in May. In June, the draft report will be available. In July the committees will have an opportunity to comment on the draft and attach their comments as addenda to the final report that will be submitted at the end of the month.

ITSG suggested that photographs of existing landfills and WTE facilities should be included in the presentations. ITSG also suggested that the division should present information about good and bad examples of WTE projects in the Pacific Northwest, as MSMWAC will certainly want to know what has been done locally in the past.

ITSG discussed the possibility that cities and county council may not reach the same conclusion on the question of disposal method. Although this has never happened before, according to the Interlocal Agreements (ILAs) and state law, the Department of Ecology would mediate in that situation.

III. Single Family Recycling Options

Recycling and Environmental Services Manager Jeff Gaisford gave a presentation on single family curbside recycling options for the Comp Plan. It is available at:

<http://www.metrokc.gov/extranet/dnrp/swd/SFOptions.ppt>

ITSG discussed the differences between single family and multifamily waste. A major difference is the proportion of yard waste, which could change over time as a result of recycling programs as well as changes in development patterns as smaller lot sizes become more common. Gaisford said that embedded rates can be included in garbage or

yard waste fees, but that it is more effective when garbage, recycling and yard fees are all embedded in the garbage fees.

ITSG also discussed the fact that different collection programs can result in fewer or more truck trips, and that can tie in with sustainability initiatives.

ITSG discussed the numbers that were used in the presentation, and how they were generated. Members suggested that because they are estimates, numbers should be rounded in order to avoid giving the impression of more accuracy than is available.

ITSG discussed plastic bags and plastic film (produce and dry cleaning bags), noting that individual bags are almost weightless and yet this kind of plastic constitutes nearly 12 tons of waste annually. Council staff Mike Reed asked about applying a bottle bill concept to plastic bags in order to avoid a more regulatory approach. Rob Van Orsow of Federal Way noted that a bottle bill would best be enacted at the state level, while taxes can be applied at the county level.

Gaisford distributed two additional handouts: a table of multifamily recycling rates and a table of single family garbage and recycling rates. He asked city members to review these and give him any corrections. Single family recycling and garbage data are collected differently. The division performs waste characterization studies on garbage samples. These composition data are applied to the tonnage values that are reported by the haulers. For recycling, the division must rely entirely on data provided by the haulers. There are no reporting protocols or auditing procedures in place, and the division is trying to work with the haulers to standardize the data.

ITSG suggested that the numbers should be explained before they are presented when the presentation is given at MSWMAC.

Next Steps

Van Orsow will give the ITSG update at the May MSWMAC meeting.

Sharon Hlavka of Auburn will give the ITSG update at the June MSWMAC meeting.

The next ITSG meeting is scheduled for May 23.