

Joint SWAC/MSWMAC Advisory Committee Meeting

April 21, 2017 - 11:15 a.m. to 1:15 p.m.
King Street Center 8th Floor Conference Room

Meeting Minutes

MSWMAC Members	
David Hill	Algona
Joan Nelson	Auburn
Bill Pelosa	Auburn
Alison Bennett	Bellevue
Sabrina Combs	Bothell
Austin Bell	Burien
Brian Roberts	Burien
Barre Seibert	Clyde Hill
Chris Searcy – Vice Chair	Enumclaw
Rob Van Orsow	Federal Way
Jenna McInnis	Kirkland
John MacGillivray	Kirkland
Penny Sweet – Chair	Kirkland
Phillippa Kassover	Lake Forest Park
Diana Pistoll	Maple Valley
Carol Simpson	Newcastle
Jerallyn Roetemeyer	Redmond
Linda Knight	Renton
Beth Goldberg	Sammamish
Rika Cecil	Shoreline
Uki Dele	Shoreline
Scott MacColl	Shoreline
Paula Waters	Woodinville
Bernie Talmas	Woodinville
Kellye Mazzoli	Woodinville

King County Staff
King County Staff
Jamey Barker, SWD staff
Jennifer Devlin, SWD staff
Jeff Gaisford, SWD staff
Matt Hobson, SWD staff
Beth Humphreys, SWD staff
Ross Marzolf, KC Council staff
Pat D. McLaughlin, SWD staff
Meg Moorehead, SWD staff
Yolanda Pon, Public Health - Seattle King County
Olivia Robinson, SWD staff
Terra Rose, KC staff
Eben Sutton, SWD staff
Guests
Doreen Booth, Sound Cities Association
Laura Moser, Waste Management
Tom Parker, CH2M
Janet Prichard, Republic Services
Phillip Schmidt-Pathmann, NEOMER
Heather Trim, Zero Waste Washington

SWAC Members	
April Atwood	Mason Giem
Elly Buzendahl	Kim Kaminski
Gib Dammann	Kevin Kelly
Karen Dawson	Keith Livingston - excused
Joe Casalini	Ken Marshall
Jean Garber - Chair	Barbara Ristau
	Stephen Strader

Minutes:

No minutes were reviewed at this meeting. MSWMAC and SWAC will review and approve minutes from their March meetings at their May meetings.

Updates

Solid Waste Division (SWD) Update

New Assistant Division Director to Begin May 1

SWD will have a new Assistant Division Director (ADD) beginning May 1. Glynda Steiner, whose extensive career experience includes serving as the Construction Management Division Director for Seattle Public Utilities and, most recently, as an Asset Management PMO and Standards Senior Manager for Seattle City Light, accepted SWD's offer to serve as the new ADD in early April. To ensure Glynda has a smooth transition, Eben Sutton will continue to serve in a special duty capacity. Manny Cristobal, who is backfilling Eben as Interim Enterprise Services Manager, will also remain at SWD until Eben returns to his role as Enterprise Services Manager.

SWAC Chair Jean Garber asked if the county is accepting LED lightbulbs for recycling. SWD staff Jeff Gaisford replied to say there are currently no great options for recycling LED lightbulbs, but fortunately they do not contain toxic elements and they do not burn out very often.

Garber also asked if the division was close to finalizing the location of the south county transfer station. SWD Director Pat McLaughlin reported that the county and the City of Algona were in the midst of productive conversations. Algona Mayor David Hill had no additional comments.

MSWMAC Update

MSWMAC Chair Penny Sweet explained the purpose of the MSWMAC meeting ahead of the joint committee meeting was to finalize a statement intended to share the thoughts of MSWMAC members on Demand Management with the King County Council, similar to what SWAC chose to do via a resolution.

Comp Plan Discussion

SWD staff Beth Humphreys presented a brief [overview](#) of progress to date on the Comp Plan. The division has discussed the Comp Plan with the advisory committees at monthly meetings since January. The planning policies in the Planning chapter will remain as they are written as the committees are in agreement. There is also general agreement on the first, third, fourth and fifth policies listed in the Waste Prevention and Recycling (WPR) chapter. The second WPR policy is being revised with new language and will be discussed again in June. In May, there will be a continuation of the Disposal Chapter that begins at today's meeting.

SWD staff met with the cities' recycling coordinators in April to discuss recommended actions to support the policies in the Comp Plan. Another meeting is scheduled with recycling coordinators in May to finalize the list of recommended actions. SWD staff will share those actions with the advisory committees in June.

SWD staff Matt Hobson then introduced the Disposal chapter, noting that 95 percent of MSWAMC and 91 percent of SWAC members who took the preliminary Comp Plan survey support the county's policy of maximizing the capacity and lifespan of the Cedar Hills Regional Landfill. If no new capacity is developed, the current estimate for when the landfill will be full is 2028.

The county has been sending garbage to the 920-acre landfill since the mid-1960s. Since then, the types and quantities of waste have gone through a number of changes which correlate with the health of the economy; studies have shown that more waste is generated in a healthy economy. Other factors also contribute to a municipality's decision on disposal methods, such as geography, population density, cost of land, etc.

During the presentation, Chair Garber asked about the current compaction rate (1,600 pounds per cubic yard) and wondered what happened to the idea of testing early waste export. Hobson answered that the landfill has fixed costs that will last through the 30 years the county is obligated to hold it in custody, thus exporting some waste early would incur additional costs to current landfill operations.

In regards to Waste to Energy as an alternative to landfilling, Joe Casalini noted that Republic maintains a monofill to store the ash residual from the City of Spokane's waste incinerator. Casalini reports that the amount of ash created is equivalent to 30 percent of the waste incinerated. It was also noted that Washington State does not allow renewable energy credits for WTE facilities.

Discussion Questions:

- What local factors impact the long-term disposal option for King County?
- What factors should be considered (and when) to choose a post-Cedar Hills waste solution?

Factors mentioned:

- Water quality surrounding the landfill
- Cost effectiveness
- Multi-family recycling solutions
- Cost comparison across options
- Scalability
- Carbon footprint
- Impact on salmon recovery
- Quickly able to adapt to changing conditions

Hobson then provided an overview of four long-term disposal alternatives:

1. Expand Cedar Hills Capacity
2. Export to Out-of-County Landfill
3. Waste-to-Energy
4. Emerging Technologies

Hobson noted that expanding the landfill would require an environmental review to expand landfill capacity to a new Area 9 and increase height, which would add at least 17 million

cubic yards of capacity and extend the life of landfill through 2040 and perhaps longer. The current 1,000-foot buffer surrounding the landfill would remain in place and not used for the added capacity. The division would also continue its landfill gas recovery program, which reduces greenhouse gas emissions at a rate that exceeds national averages and produces \$1M to \$3M/year in gas revenue. Due to the amount of required excavation, the capital costs (estimated at \$229 million) are higher than previous expansion projects, but this option benefits from the division's trained work force and experience operating the landfill.

Exporting waste via rail or another transportation mode to out-of-county landfills, such as southern Washington or northern Oregon, is expected to require environmental review of redirecting 40,000 truckloads per year. Under this approach, to ensure transportation efficiency, compaction would be necessary at all transfer stations. Currently, Algona, Houghton, and Renton do not have compaction capability. Apart from adding compactors at the transfer stations to improve transportation efficiency, it is expected no other significant County capital projects would be required for this option. A long-term contract with a rail company and a landfill owner is projected to provide stable cost increases year-to-year for inflation. Based on regional pricing for waste export (without accounting for compaction improvements at County stations), the division anticipates this option would cost \$60 to \$80 per ton in 2028 when Cedar Hills reaches current permitted capacity.

The third option of incinerating waste in a waste-to-energy (WTE) facility is a reliable method of waste disposal, however a landfill would need to be used for the ash and any waste that cannot be burned. It was noted that the Cedar Hills Regional Landfill is not permitted to accept WTE ash, which is considered hazardous, and the current workforce is not trained to manage it. The cost of constructing a WTE facility is estimated at \$750-\$850M.

While emerging technologies (gasification, pyrolysis) are making advancements, currently none are scalable to King County's need to dispose upwards to 1M tons of waste per year. The division will be paying attention to further developments for potential pilot programs. Recent local and regional studies have included advanced material recycling facilities as an option to boost recycling rates and lower greenhouse gas (GHG) emissions.

SWD staff evaluated the first three feasible options by reviewing recent disposal studies, county data and forecasts, and interviewed industry representatives. Their analysis focused on finances, GHG emissions, and impacts on recycling rates. The final phase of this research includes a third-party review of the findings. In the meantime, initial findings show that expanding the landfill's permitted capacity currently is the most cost-effective with the least amount of volatility or uncertainty.

Discussion Questions:

- Policy D2 says to maximize the capacity and lifespan of Cedar Hills subject to environmental constraints, relative costs, and stakeholder interests.
 - *What are the advantages and disadvantages of each disposal option in terms of environmental constraints, cost, and stakeholder interests?*

- Initial Findings: Expanding Cedar Hills Best Supports Disposal, Financial, and Environmental Goals
 - *Do you support this alternative?*
 - *What additional information of the alternatives would you like to see in advance of the May 2017 committee meeting?*

Chair Garber noted one of the disadvantages of WTE is the matter of a report stating that WTE facilities in the U.S. are offline an average of 29 days per year. Since most of the U.S. WTE facilities are around 30 years old, Phillippa Kassoover and Carol Simpson are both interested in learning more about WTE facilities in Europe as they use newer technologies than U.S. facilities. Simpson also expressed an interest in inviting WTE experts to a meeting to share their information. Kim Kaminksi noted other studies show that WTE facilities decrease recycling rates, not increase them, and in the case of European facilities, they run out of material to burn and need to import waste to meet energy needs. It was reiterated by several throughout the meeting that Washington State and/or King County is among the best in the nation for our recycling efforts due to a decades old aversion to incinerating potential resources. McLaughlin stated the division's commitment to working with current information and noted SWD staff recently met with WTE experts and findings from those meetings are included in today's handouts.

Brian Roberts noted that waste prevention and product stewardship efforts are paramount to extending landfill capacity. McLaughlin acknowledged the division would need to make bold measures to increase the gains made by those efforts.

Mason Giem suggested advanced material recovery (AMR) facilities that sort recyclable materials from the mixed municipal solid waste stream would increase recovery rates as a supplement to existing practices, although it was pointed out that such recovery produces contaminated materials with limited marketability. Paula Waters also expressed an interest in learning more about advanced AMR facilities.

Elly Buzendahl said our region's ability to do certain things efficiently is one of our greatest resources as she drew parallels to electricity production. April Atwood and Gib Dammann agreed with Roberts as to product stewardship being an essential factor to waste management; producers and manufacturers should have more responsibility for reducing or recycling waste.

Kassoover asked if there was anything to be gained from a partnership with the City of Seattle, particularly in regards to WTE in the event King County might not produce enough waste.

Barbara Ristau is interested in learning about impacts on the job market for each alternative. Casalini is interested in seeing an inventory of existing facilities that would support each alternative – such as rail yards and recycling centers.

Public Comment

Phillip Schmidt-Pathmann reported that the 50 WTE facilities in Europe have recycled 100 Golden Gate Bridge's worth of metals and the cost of building and operating these facilities

per person is lower than what we currently pay. He would like to bring WTE experts to a meeting for an adequate overview. Hobson closed the meeting with the reminder that a third-party review of the division's research will be conducted over the next 90 days.