

**KING COUNTY METROPOLITAN SOLID WASTE MANAGEMENT ADVISORY COMMITTEE**

**May 11, 2007**

**11:45 – 2:30 p.m.**

**King Street Center, 8<sup>th</sup> Floor Conference Center**

**Approved Minutes**

Members in Attendance

<u>Name</u>	<u>Agency</u>	<u>Title</u>
Jeff Viney	City of Algona	Councilmember
Bill Peloza	City of Auburn	Councilmember
Susan Fife-Ferris	City of Bellevue	Conservation and Outreach Program Mgr.
Debbie Anspaugh	City of Bothell	Administrative Coordinator
Don Henning	City of Covington	Councilmember
Rob Van Orsow	City of Federal Way	Solid Waste and Recycling Coordinator
Jessica Greenway	City of Kirkland	Councilmember
Jim Lauinger	City of Kirkland	Mayor
Erin Leonhart	City of Kirkland	Public Works Maintenance Supervisor
Jean Garber	City of Newcastle	Mayor
Dale Schroeder	City of SeaTac	Public Works Director
Frank Iriarte	City of Tukwila	Deputy Public Works Director
Valarie Jarvi	City of Woodinville	Public Works Maintenance Supervisor

Others in Attendance

Solid Waste Division

**Theresa Jennings, Solid Waste Division Director**  
**Kevin Kiernan, Engineering Services Manager**  
**Jeff Gaisford, Recycling and Environmental Services Manager**  
**Bob Tocarciuc, Planning Supervisor**  
**Diane Yates, Intergovernmental Relations Liaison**  
**Jane Gateley, Technical Writer**  
**Gemma Alexander, SWD Staff**  
**Jennifer Broadus, SWD Staff**  
**Josh Marx, SWD Staff**

King County Council Staff

**Beth Mountsier**

Guests

**Amy Ensminger, City of Woodinville**  
**Karl Hufnagel, RW Beck**  
**Rory Tipton, RW Beck**  
**Kirk Winges, Geomatrix**  
**Harvey Gershman, GBB**  
**Frank Bernheim, GBB**  
**Chace Anderson, GBB**

1 **Call to Order**

2 MSWMAC Chair Jean Garber called the meeting to order at 12:00. Everyone present  
3 introduced themselves.

4  
5 **Third Party Review**

6 Solid Waste Division Director Theresa Jennings introduced the consultant firm  
7 Gershman, Brickner & Bratton, Inc. (GBB), selected by council to perform the third party  
8 review; Harvey Gershman, Frank Bernheisel, and Chace Anderson.

9  
10 Gershman gave a PowerPoint presentation on the third party review team and their  
11 approach to the review, available at:

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

13  
14 Garber asked where construction, demolition and landclearing waste (CDL) fits in to the  
15 review, given that it is handled separately from MSW by private companies under  
16 contract to the County. Gershman replied that CDL is often mixed in with municipal  
17 solid waste (MSW), and they intend to address that.

18  
19 Gershwin said he met with MSWMAC Vice Chair Jessica Greenway yesterday and  
20 welcomes input from any MSWMAC members who would like to give input. His team  
21 is available in person this weekend, or by telephone through the end of the week. Their  
22 toll free number is 800-573-5801. Anderson can be reached directly at 541-324-3396.  
23 Gershman can be reached by email at [hgershman@gbvinc.com](mailto:hgershman@gbvinc.com).

24  
25 **Approve April Meeting Minutes**

26 *Greenway moved approval of the April minutes.*

27  
28 *The April minutes were approved by consensus.*

29  
30 **SWD Update**

31 Solid Waste Division Director Theresa Jennings announced that the division has  
32 completed a landfill gas to energy contract with a new vendor, Ingenco, who proposes to

33 convert landfill gas to pipeline quality gas, which will be inserted into the Williams  
34 pipeline that runs across the south side of Cedar Hills. Puget Sound Energy and Seattle  
35 City Light are both interested in buying the energy produced. The contract will go to  
36 council in June. Construction is anticipated to begin in 2008.

37

38 The rates proposal has been scheduled for the Operating Budget Committee on June 13.  
39 The ITSG legislation went before the Regional Policy Committee (RPC) last week.  
40 Discussion has been postponed. RPC also reviewed the governance report, and has asked  
41 staff for more information.

42

43 MSWMAC member Bill Pelozza asked what will happen next with the governance report.  
44 Intergovernmental Relations Liaison Diane Yates said that council staff Beth Mountseir  
45 will give a report to RPC next month with more detail and specific advice to the  
46 committee.

47

48 Jennings reported that the report on in-sourcing of recyclables hauling and the Bow Lake  
49 Transfer Station Master Facilities Plan and are on Tuesday's Growth Management and  
50 Natural Resources (GMNR) Committee agenda.

51

52 Recyclables are currently hauled from transfer stations by Renu, which has provided  
53 good service. The division believes it can provide the service at a lower cost.  
54 Ultimately, it is a policy question about whether the service should be publicly or  
55 privately provided.

56

57 MSWMAC member Rob Van Orsow asked if the same policy question would affect  
58 collection of new materials at First NE. Jennings replied that the division can always  
59 modify services provided at the transfer stations, as well as arrange special recycling  
60 events. At Factoria Transfer Station, limited space required a choice between providing  
61 recycling service or household hazardous waste collection.

62

63 **ITSG Update**

64 Van Orsow reported that ITSG was well attended in April. Members discussed single  
65 and multifamily curbside recycling program options and their potential impacts. Staff  
66 provided a menu of program options. This topic will be on MSWMAC's June agenda.  
67 ITSG also heard a summary of the waste to energy presentation that MSWMAC will see  
68 today.

69

70 Van Orsow commented that cities' attendance at ITSG is very important. Especially as  
71 the Comp Plan is developed, it is helpful and more efficient to get everyone in one place  
72 where they can all hear the same information.

73

#### 74 **SWAC Update**

75 Yates said that SWAC met earlier this morning and had the same presentations that  
76 MSWMAC will see today.

77

#### 78 **Rate Proposal**

79 Garber presented a letter in support of the rate proposal. She said that SWAC and the  
80 Suburban Cities' Association Public Issues Committee have both sent letters to council in  
81 support of the proposal. Greenway introduced the subject when she chaired  
82 MSWMAC's meeting last month. Garber added that she heard that meeting went very  
83 well and thanked Greenway for chairing the committee in her absence.

84

85 **Greenway moved approval of the letter supporting the division's rate proposal.**

86

87 *The motion passed with Bellevue abstaining and no votes against.*

88

#### 89 **Waste to Energy**

90 Engineering Services Manager Kevin Kiernan introduced RW Beck consultants Karl  
91 Hufnagel and Rory Tipton, and Geomatrix consultant Kirk Wings. Kiernan said the  
92 consultants will present preliminary results of their findings in the waste to energy study.

93

94 Hufnagel gave a PowerPoint presentation on the preliminary findings of the waste to  
95 energy study, which is available at:

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

97

98 MSWMAC member Dale Schroeder asked why no new waste to energy facilities have  
99 been built in the United States. Hufnagel replied that there is plenty of landfill space in  
100 the US, which has been less expensive and requires less capital investment. Further,  
101 there were environmental concerns about the technology.

102

103 In response to a question about financing, Hufnagel said that the relationship between  
104 public and private sectors is different in Germany, but the facilities he visited were  
105 publicly owned.

106

107 MSWMAC member Jim Lauinger asked if there were any environmental concerns about  
108 ash leaching toxins. Hufnagel said that there is, and that is why ash is required to be  
109 disposed in a dedicated monofill with a double liner, and the toxic fly ash is diluted by  
110 mixing with bottom ash. In Germany bottom ash is used for roadbeds, or under other  
111 impermeable surfaces, while fly ash is disposed in old salt mines.

112

113 MSWMAC member Susan Fife-Ferris asked where ash from King County would go.  
114 Hufnagel replied that the only monofill in Washington is at the Roosevelt landfill.

115

116 Pelosa asked about the liner for an ash monofill. Hufnagel explained that it is a  
117 prescribed synthetic liner system that is usually combined with a clay layer. Kiernan  
118 added that it is similar to the liner at Cedar Hills, only doubled.

119

120 Greenway asked if costs in the study include land acquisition. Hufnagel said they do not.

121

122 Greenway asked about the amount of land required for the different types of facilities.

123 Hufnagel said that information will be in the report, but he thinks waste to energy  
124 requires approximately fifty to sixty usable acres, while intermodal facilities may require  
125 about twenty to thirty acres.

126

127 Fife-Ferris commented that an intermodal facility will be required under any disposal  
128 scenario. Hufnagel agreed that some intermodal capacity will be required regardless, but  
129 under a waste to energy disposal option, only about 20% of the total volume of waste  
130 generated will be exported as ash. This amount could be handled by a smaller intermodal  
131 facility, or possibly even existing facilities. He added that in any case, land cost is going  
132 to be a relatively small part of the cost of a half billion dollar facility.

133

134 Schroeder asked if the landfills for export have landfill gas collection systems. Tipton  
135 replied that they do, but only one of them currently produces energy with the gas that is  
136 collected.

137

138 Van Orsow asked if revenue was presented net of capital costs. Hufnagel replied that  
139 revenue is purely the value of gas produced, and is not net of anything.

140

141 Pelosa noted that disposal at Cedar Hills is the lowest cost option. Hufnagel agreed that  
142 until Cedar Hills closes, it is the least expensive option.

143

144 Greenway commented that she was surprised there wasn't a greater increase in costs  
145 between disposal at Cedar Hills and waste export. Jennings said the value for disposal at  
146 Cedar Hills should be shown as the present value of \$32.50.

147

148 Greenway said that better illustrates the fact that whatever disposal method is chosen  
149 after Cedar Hills closes will cost more than what people are paying now.

150

151 Garber asked if the study assumes King County will not receive landfill gas revenue.

152 Hufnagel replied that is the assumption used in the study.

153

154 Garber said it was wise to use that assumption.

155

156 Fife-Ferris asked if ash disposal costs are included in the calculations for mass burn and  
157 refuse derived fuel (RDF) technologies. Hufnagel said they are.

158

159 Peloza asked why the cost of transfer stations was not included in the waste export cost  
160 information. Greenway responded that transfer stations will be required under any  
161 disposal option, and so can drop out of the comparison.

162

163 Kiernan explained that biogenic carbon in the waste stream is carbon that comes from  
164 plant matter, which pulls carbon from the atmosphere. When carbon dioxide from these  
165 sources is released through incineration, there is no net change in the amount of carbon  
166 dioxide that would have been released through natural decomposition when the plants  
167 die. Therefore, the Kyoto Protocol does not count biogenic carbon emissions. There  
168 may be some issues with the timing of those emissions, as was discussed in SWAC this  
169 morning. Also, landfilling sequesters some carbon by preventing or significantly  
170 delaying decomposition, and keeping carbon from re-entering the atmosphere.

171

172 Hufnagel added that plastics come from oil, which would not normally release emissions  
173 without human intervention. Carbon dioxide from petroleum sources counts as an  
174 emission under the Kyoto Protocol. Regardless of their source, emissions of methane,  
175 which is a much more powerful greenhouse gas, are always counted under the Kyoto  
176 Protocol.

177

178 Van Orsow asked Kiernan to repeat what he told ITSG about landfill gas detection at  
179 Cedar Hills. Kiernan said the division tests the surface of the landfill for methane on a  
180 quarterly basis and is usually unable to detect any.

181

182 In response to a question, Kiernan said the division has a very aggressive landfill gas  
183 collection system that draws a vacuum through the entire landfill.

184

185 Greenway asked if a remote landfill could be assumed to reach the same standards.

186

187 Kiernan replied that wherever King County's waste goes, it will be under terms set by  
188 contract. At one million tons per year, King County's contract could be expected to  
189 influence operations at the destination landfill.

190

191 Wings added that landfill gas controls are required by federal law, so the only question  
192 is whether another landfill will be as efficient and effective as Cedar Hills.

193

194 Lauinger asked about the greenhouse gas impacts of rail hauling. Hufnagel said that  
195 locomotive emissions from long haul transport were included in the study. The study  
196 also accounted for the different number of trains that would be required under different  
197 disposal methods.

198

199 In response to another question, Wings said that all solid waste management is a net  
200 benefit compared to unmanaged waste. The question is only which method manages  
201 greenhouse gases better. Locally, landfilling is a slightly better method when calculated  
202 using strictly molecular calculations. Using the Kyoto Protocol, the actual numbers  
203 change, but the final conclusion that landfilling produces 60-70% as much greenhouse  
204 gas as conversion technologies does not. The actual figures are presented in the report.

205

206 Kiernan said it is his opinion that despite the attention given to the Kyoto Protocol there  
207 is actually a lot about it that is still being interpreted. Kyoto standards are not a fixed  
208 equation, and the more you study them the more confusing they become.

209

210 Wings added that a good example is metals. When you incinerate a tin can, which does  
211 not contain any carbon, you still waste energy to heat the metal, and that energy has a  
212 carbon value that must be accounted for.

213

214 Fife-Ferris said that she would like to know what the difference was between cost  
215 projections for the Spokane waste to energy facility and the actual cost. She  
216 acknowledged that this is anecdotal information, but said she would still be interested to  
217 see that information. Hufnagel said he could get that information to her.

218

219 Kiernan commented that it is not unusual for capital costs to exceed projections by forty  
220 percent in recent years.

221

222 Lauinger asked how to reconcile the twenty year burn period of a waste to energy facility  
223 with the long period of landfill gas projection. Hufnagel said that this study looked out to  
224 the year 2200 and identified the production curve.

225

226 Kiernan commented that state and federal regulations require post-closure maintenance of  
227 landfills for thirty years.

228

229 Garber said that she disagreed with the finding that one transfer station could be  
230 supplanted by an incinerator. She said to serve their purpose, transfer stations should be  
231 located in urban areas near centers of waste generation and it is possible to design a  
232 transfer station to be very compatible with adjacent urban land uses visually and through  
233 traffic control measures. She said she believes it would be much more difficult to design  
234 an incinerator to be visually compatible with adjacent urban land use, especially one with  
235 four separate 800 tpd processing lines (and four stacks with visible plumes at times).  
236 Such a facility would probably have to be located outside of the urban area in order to be  
237 less visible.

238

239 Hufnagel agreed that the King County facility would be very large, and said none of the  
240 study's calculations assumed co-location with a transfer station.

241

242 In response to a question, Wings said that Ambient Air Standards are regulatory, and  
243 cannot be exceeded, while Acceptable Source Impact Levels (ASILs) are not a hard  
244 standard. If ASILs are exceeded, one only has to do a health impact statement. He said  
245 ASILs are set so low that there is no concern about exposure at those levels.

246

247 Mountsier asked if the study considered market demand for energy produced. Hufnagel  
248 replied that a very sophisticated computer model was used which included regional  
249 market demand in order to develop cost estimates. Wings added that the energy  
250 produced from waste is not very significant relative to the amount of energy produced by  
251 power plants.

252

253 Van Orsow asked why revenue was only considered for twenty years while emissions  
254 were looked at for a longer period. Hufnagel replied that from an environmental  
255 standpoint it is necessary to look at a long time period to understand the inputs. When  
256 considering energy, it was not clear who would own the power generated and get the  
257 benefit from it, so that value was discounted in the economic equation. Tipton added that  
258 it is also impossible to project long range energy values.

259

260 Hufnagel said that a life cycle cost analysis would be required before making a final  
261 decision. He noted that with twenty year bonds, energy production would result in a  
262 revenue stream for the remainder of the fifty year life of a conversion facility. That final  
263 thirty years needs to be studied and could affect the final outcome.

264

265 Kiernan added that this study also did not evaluate risk, which is another factor that could  
266 affect the final result.

267

268 MSWMAC member Don Henning asked what the outcome of burning recyclables would  
269 be. Recycling and Environmental Services Manager Jeff Gaisford replied that  
270 commodity prices are high for paper, although paper, like plastic, has potential value as a  
271 fuel source. Other materials are less certain.

272

273 Kiernan said that at the next meeting MSWMAC members will be given copies of the  
274 draft report. They will have one month to review the report and then will discuss it at  
275 their July meeting. The proviso allows for MSWMAC to attach comment for transmittal  
276 with the report.

277

278 Garber complimented RW Beck on the quality of their study.

279

## 280 **Adjourn**

281 Pelosa commented that he would like to see the long term schedule on each month's  
282 agenda. He said the closure of Algona Transfer Station and conversion technology  
283 studies should be added to the schedule.

284

285 The meeting was adjourned at 2:20 p.m.

286

287 Submitted by:

288 Gemma Alexander, SWD Staff