



SPU Solid Waste Advisory Committee (SWAC)

November 2, 2016 Meeting Notes
Seattle Municipal Tower, 700 Fifth Avenue
Room 4901
5:30 pm – 7:30 pm
Chair: Chris Toman
Vice-Chair: Ben Grace

Committee Members & CAC Staff	Present?	SPU Staff & Guests	Role
Quinn Apuzzo	N	Ken Snipes	Deputy Director for Solid Waste
Anna Dyer	Y	ShaQuina Justice	Guest, Solid Waste Support
Ben Grace	P	Luis Hillon	SPU Office of Utility Services
Holly Griffith	Y	Gary Christensen	SPU FOG Program Supervisor
Jamie Lee	Y	Tim Nickell	Guest
Heather Levy	Y	Jackie Marshall	SPU Intern, Guest
Emily Newcomer	N		
Joseph Ringold	Y	CAC Staff	
Emily Rothenberg	N	Sego Jackson	Solid Waste LOB Committee Liaison
Chris Toman	Y	Sheryl Shapiro	CAC Program Manager
Colin Groark	Y	Natasha Walker	CAC Program Coordinator

ACTION ITEMS:

- Natasha: Will send an email this week to make officer nominations within the next 7 days.
- Chris reminded folks to submit any suggested workplan topics to him electronically.
- Committee members agreed that they would like to organize a tour of the North Transfer Station in 2017
- Ken to follow up on how SHA might respond to 5-gallon buckets of FOG found on MF properties.
- Sheryl asked committee members interested in participating in outreach activities for National Americas Recycle Days to contact her.

Regular Business

SWAC Secretary, Holly Griffith called the meeting to order at 5:37 PM

- Meeting notes from October were approved. Chris reminded folks to submit any suggested workplan topics to him electronically.
- Sheryl indicated emergency exits, bathrooms, and noted that she would be following up with more details concerning emergency supplies and procedures at a future meeting, likely in January.

Follow-up to ACTION ITEMS from August meeting

- Why were there cost overruns between the estimated budget in the previous SBP for transfer station(s), and the actual cost?:
 - The SBP estimate for solid waste components included in the rebuilding of the old South Transfer Station was about \$21 M from 2014 through completion. At that time the scope included a new recycling facility and trailer parking to support the new South Transfer Station and was a planning level estimate. The current scope includes a recycling facility, covered trailer parking, administrative offices, a fueling facility, signage and perimeter improvements including fencing and a pedestrian path. It is also based on a 30% design estimate. The current budget proposed in the 2017-2022 Capital Improvement Program is approximately \$34M from 2014 to completion.
 - The SBP estimate for North Transfer Station was \$71.4M from 2014 through completion. The current estimate to complete the North Transfer Station of \$105.8M. This estimate includes the following elements not included in the SBP:
 - \$10.4 M for planning and property acquisition completed prior to the SBP
 - \$7M in contaminated soils costs
 - \$2M underspending in 2013 due to delays that was carried forward
 - The rest of the cost increase is due to market changes, schedule delays and scope refinements.

1. Solid Waste Updates

Ken Snipes provided a few Solid Waste line of business updates.

- South Transfer Station fire. Ken provided a brief update on the trash fire detection and response.
 - **Committee member question:** What was the damage to the facility?
 - **Answer:** The damage was minimal. The facility is new, built in 2013. The push walls are ballistic steel. Some of the walls were damaged by warping and there are some minor repairs, but the facility came through largely unscathed. He was impressed by the quick response by everyone involved, including fleets who immediately responded with an additional loader. There will be a large water/drainage bill, due to the sheer volume of water that flooded the station.
 - Ken noted that as part of the fire, SPU had an earlier than expected opportunity to test the North Transfer Station. Just the day before the fire, they had begun testing the station with 8 loads of garbage, not knowing they would be using the station the next day. He said it was quite an effort because employees hadn't been fully trained on operating the new station, but they worked through that. He said they anticipate that on 11/28 they'll be fully on board with commercial contractors. He said he is proud of the new facility, and recommends putting it on the SWAC field trip list.
 - **Staff question:** How late will the North Transfer Station be open on a typical day?
 - **Answer:** It closes at 5:30PM due to neighborhood operating restrictions.
 - **Committee member question:** Does the new reuse and recycling facility accessed before or after the weigh in?

- **Answer:** Before the scale. This provides a huge convenience for those only recycling materials; they can loop in and out without waiting in the regular line. There is no charge for typical recycling, but they still must pay for disposal of “white goods” (appliances).
 - **Committee member question:** Can we arrange a tour?
 - **Answer:** Yes. Maybe you can have a SWAC meeting there.
 - Consensus from the committee was that they would like this.
- Homeless Encampments. Ken reviewed the ways in which SPU is involved in providing services to some of the encampments. These include:

The Sharps and Needles Program. The Mayor announced that SPU must respond to all needle calls within 24 hours, regardless of quantity. Ken said SPU will be using a combination of contractors and SPU employees to accomplish this. They are training with the public and department staff on how to respond to found needles, and Ken said the program should be fully running by end of the month.

The Bag Pilot. To provide a measure of garbage service to some encampments. When the program started, Ken said they primarily used Department of Corrections (DOC) crews to fulfil this work. He explained that due to DOC code changes, which stipulates that those who contract with them must cover L&I costs for DOC crews injured on the job, many cities/municipalities/jurisdictions have decided to pursue other avenues. SPU has decided to use contractors, for a reasonable price. He said the program will continue through the next couple years, with pilots in other areas.

- **Committee member question:** Is needle removal just happening on City property? What is the scope?
 - **Answer:** Just on SPU property and the right away. Parks covers parks property. Private property is not covered by SPU.
- **Committee member question:** If people wanted to pick up needles on private property, where would they pick up sharps container?
 - **Answer:** Public Health is a good place to start. Any plastic container is a good place to start, such as an empty Gatorade bottle. SPU is working on pricing for actual containers and seeing if we can get volume buying to make them available. They are more expensive than expected. We are also updating the Find It, Fix It app to include needles. It’s in there, but it’s buried. We want to elevate it. We are also looking at Customer Service Bureau phone tree, particularly on weekends. Parks and SPU do not typically have service on the weekend, so we are trying to resolve how to call in over the weekend and get the needles abated.

2. Fats, Oils and Grease (FOG) Program: Gary Christensen, FOG Program Supervisor

Gary provided an overview of Fats, Oils, Grease (FOG) Program. He noted that he had catered this presentation for Solid Waste Advisory Committee members, and said that he appreciated the opportunity to view FOG issues through that lens.

Gary reviewed the primary sources of FOG, and the known impacts of FOG on Seattle's sewer lines. He noted the anticipated increase in FOG issues in the future, due to projected population growth and increased housing density.

So how does FOG impact Solid Waste?

- The biggest issue is FOG transport. When pulling grease out of fryer, you are pulling a lot of solids with it. There should be screens in place to capture those solids, but those don't get cleaned, so the grease splatters everywhere (in the alleys).
- Proper disposal - Residential: "Can it, Cool it, Trash it." Specifically, to discourage FOG from being placed in the compost, as it does not compost well.
- Proper disposal - Commercial: SPU wants commercial customers to use contractors to pump and dispose of FOG. Gary said a lot of customers have smaller traps that they self-clean. He noted that though not a big enterprise in Seattle currently, there are beneficial reuses for this material. He said wastewater treatment plants have used it to power facilities, some companies use it in soaps and cosmetics, and some dog foods have FOG in it.
- Proper disposal in the face of language barriers. SPU often works with immigrants who had different practices before.
- Consequences of mismanagement of used oil. The example used was the La Mexicana tortilla factory oil spill in White Center Seattle. A 250-gallon tote of cooking oil spilled, and got into the stormwater system and subsequent pond. They had to clean over 90 birds, 7 of which died. He said the incident cost them over \$350k.

Gary reviewed some of the Best Management Practices (BMPs) for FOG. He said SPU is working to help restaurants incorporate BMPs, and providing this information via education for new restaurant staff. However, he said that the high turnover in the restaurant industry has made this challenging. SPU is exploring additional avenues of outreach, such as:

- Developing a video to post to YouTube for businesses to show to new staff
- Providing presentations to Culinary School students

Gary reviewed the Seattle Municipal Code related to FOG, and noted that SPU does not typically enforce the 100ppm limit as it is an extremely difficult and expensive test to perform or request. Limits like this were created for industries with professional environmental staffing who are knowledgeable about this type of regulation and analytical requirement, not small businesses such as restaurants. Only about 20% of restaurants in Seattle meet the current code. In addition to reviewing actions that businesses and the public can take to reduce FOG issues, Gary reviewed how SPU is looking to change their approach as well:

- Move from "adversary" to partner. We have come to expect restaurants to be non-compliant. SPU wants to get in front of restaurants *before* they're built, so they can enter the relationship assuming compliance.
- Increase FOG inspector efficiency. Non-compliance = longer inspection/re-inspection process. SPU would like to increase compliance so they can increase the number of restaurants they inspect each year.

- Reduce risks to the Drainage and Wastewater LOB. The risks include Sanitary Sewer Overflows (SSOs), regulators coming after SPU, seeing FOG going down the street, etc.
 - Educate restaurants - Establish a restaurant registration program with authorization to discharge certificate so they will know what is expected of them before an inspector arrives.
 - Improve industry knowledge with contractors / plumbers / service industry via a training program.
 - “Build It Right...” Bring plan review and inspection process for grease interceptors from King County in-house to SPU. Current plan review process does not have adequate resources to focus on this critical portion of the Seattle Plumbing Code.
 - Require a Maintenance Record submittal to SPU (utilizing mobile device/smartphone technology).
 - Establish better partnerships with the community to reduce residential FOG discharges.
 - Make household BMPs common knowledge through education/outreach.
 - Develop program metrics to better assess the effectiveness of the program and the changes we are incorporating.
 - Clarify the code, and develop a Director’s Rule written in plain English that will be specific.
 - o Existing Side Sewer Code sample language: *“For purposes of this subsection, a grease interceptor is not in continuously efficient operation and is in violation of this chapter if the total volume of grease, solids, or food waste at any time displaces more than twenty-five percent of the effective volume of any chamber of the grease interceptor.”*
 - o Future Directors Rule Sample language: *“Maintain grease interceptor as follows: 50 gal or less – every 14 days, 50 gal to 300 gal - every 30 days, 300 gal or more – every 90 days).”*
- **Committee member question:** What does 100 ppm look like?
 - o Answer (Gary): It’s a difficult standard to meet without a grease trap device. Even something like a Subway, without a grease trap device, would probably not meet the standard.
 - **Committee member question:** I work at Seattle Housing Authority. Occasionally, at one of our Multi-Family buildings, a 5-gallon bucket or two of FOG will show up. We don’t know if its residents or not. What do we do with it?
 - o Answer (Ken): That’s a good question. I’ll have to look into it. I believe it can be recycled. But typically, at transfer stations they don’t see cooking oil, usually just used motor oil. Observation: I don’t want to speak for Ken here but I think the answer was that it can be taken to the transfer station. He might have said that they see more used motor oil but I think for clarity you would want to say that the containers can be taken to the transfer station.
 - o Committee member question: So, if we took it to transfer station, would we be able to recycle? This seems a little off from my memory, I think the answer to this question is a simple yes. I then believe the follow-up question which ran into the next question was if they could have a large used cooking oil bin placed on site at a multi-family housing

facility. These were the answers below. Basically, the large containers are supplied under a private contract between the property owner and the recycling company. Whether or not the multi-family housing facility would warrant such a bin placement would be between the property owner and one of the private recyclers. SPU does not offer a service of this nature to my knowledge. I just saw the e-mail response below... My note here was probably covered under that response.

- Answer (Ken): Typically, with food vendors, they have contractors that pump it out.
- Answer (Gary): Typically contractors deal in 100's of gallons though. I can share that list of companies, as I think they would be receptive to taking them. That's probably a gap in our system.
- **Committee member question:** If it's inconvenient/economical to take it to a transfer station, can we put it those 5 gallon buckets in garbage? It's occasional. Sporadic, but it's a thing that happens. Probably about 5 instances per quarter.
 - Answer (Gary): No. That's too much quantity for garbage.
 - Answer (Ken): I will commit to an official answer tomorrow on a proper disposal process.
- **Committee member question:** Sounds like there are recycling programs?
 - Answer (Gary): Not for brown Grease, which comes out of grease traps. That's low quality, so not a lot of BTUs. Hard to find beneficial, cost effective reuse here. Cooking oil is very recyclable though.
- **Follow-up emailed to committee member on 11/21:** SPU accepts used cooking and motor oil in the regular recycling collection if put in 1 gallon sealed jugs. You can leave up to 2 gallons per collection day. The transfer stations can also accept up to 5 gallons for free. It's important that these containers be sealed closed. Alternatively, two firms accept residential used cooking oil for recycle: General Biodiesel (206) 932-1600 and Standard Biodiesel (206) 388-3869. Please call them for information on their residential cooking oil drop-off sites. One nuance about FOG versus used cooking oil -- Used cooking oil is recyclable but FOG is not. FOG as a whole is garbage, as are grease and fats. The used cooking oil that is recyclable is usually from deep frying (e.g. turkeys, lumpia, chicken wings, etc.) and doesn't have any bits of food or other types of fats mixed in. You can find additional material disposal guidelines at <http://seattle.gov/util/wheredoesitgo/>.
- **Committee member question:** What happens to non-recyclable stuff?
 - Answer (Gary): Typically ends up in landfill. If it's done by a vendor, WWTP treats it at the WWTP facility. Likely ends up in the landfill after being treated.

3. Recycling Goals: How Did We Get Here? Luis Hillon, SPU Office of Utility Services - Economic Services

Chair Chris Toman and Solid Waste LOB Policy Liaison Segoo Jackson opened, setting context for the presentation. Segoo noted that this presentation was likely one of a series of presentations on measurements and metrics, to be staggered out over several upcoming months.

Luis Hillon reviewed the purpose of the presentation, explaining that it had been put together, in part, to provide background to several new employees in the Solid Waste LOB, but also to evaluate whether the current Solid Waste Plan is well aligned with SPU's 2018-2023 Strategic Business Plan. Luis covered the following topics in his presentation:

- How SPU arrived at 60% (2015) and 70% (2022) recycling rate goals
- Overview of Solid Waste SPU data (Data for predictive model)
- What the Recycling Potential Assessment (RPA) Model assumes and how it works.
- What we've learned since we last conducted the RPA and set the goals

Conceptually, the RPA seeks to provide Solid Waste/Recycling services in the most cost effective way possible. Luis explained that to do this, SPU runs several LOB scenarios through the model, determines the cost/rates, and then conducts an economic analysis. He reviewed the cost composition, which is a combination of market value for recycled goods, avoided cost/savings, and additional benefits (such as environmental benefits). Luis also reviewed assumptions in the model, including economic considerations, recovery rate considerations, and costs. Luis then walked committee members through a few example scenarios, and explained how SPU seeks the most cost effective scenario.

To have this economic model, Luis explained, SPU needs a lot of data. These include quarterly reports on the tonnage of garbage, organics, and recycling (the waste composition). Every four years, SPU also conducts a waste composition study and waste prevention survey. Luis provided the status of those reports.

- Just finished the Recycling report.
- Working on the Home Organics Survey.
- Working on the Organics Composition Study.
- Working on the commercial and self-haul waste composition study.

Luis reviewed the basic of recycling economics, and explained that to determine the cheapest way to provide solid waste and recycling service, SPU uses Benefits and Life Cycle Assessments to compare the cost with the benefits, including financial, avoided cost, and environmental benefits. He noted that he has not heard of many cities using these life cycle assessments, and said these studies are available for review on the SPU website

So, what has changed since the last the Recycling Potential Assessment, and what are the next steps?

- Growth of the Multi-Family (MF) sector. This impacts overall recycling rate (as in cost) because the MF sector is growing, but it's the sector where solid waste is lowest in their goals.
- Increase in contamination, based on the 2015 residential recycling stream composition study. Luis said there is currently no program or plan or education to address this. This encompasses all contamination in recycling, not just plastics/film in compost.

- The impacts of the opening of the North Transfer Station on the self-haul sector.
- 2018 Review of the Solid Waste Plan for the Department of Ecology. Revisit assumptions, dates, recovery rates and cost. **Want SWAC input in the future planning of solid waste. Will start that process now – updating the model. Will also do an evolution of what is happening now: what is the impacts of the organics ban, etc. We will report to SWAC on the results of those analysis.**
- How to implement and include more waste prevention in planning. The new General Manager / CEO wants to prioritize Waste Prevention as well. We need to start reserving money now to begin studying this, to begin thinking about how we are going to measure waste prevention.
- Diapers. Question of how we are going to manage diapers, and reduce the use of diapers. We are supposed to begin implementation in 2020. We need to reserve money now for that study. We need to begin a pilot, so that we are ready to implement in 2020.
- MRF. Started a study 4 years ago of locating a MRF close to the south transfer station. Reserved some area of land to put in a MRF. We conducted a financial study, and it was positive in terms of self-haul and commercial sector material recovery. Lots of discussion on the opportunity cost of land in Seattle, which is high, and there are lots of competition for land that SPU has there. Was not included in the 10-year Solid Waste plan, but we see it as a possible option in the future. Another option is to use that land for a treatment facility, maybe composting or a mix of composting or processing organics.
 - o Sego provided some additional background: As you know, we're going through the strategic business planning process which includes a baseline process. There is the question of whether we include the programs which generated the 70% recycling goal. Part of this presentation was to inform SPU leadership on how we came to these goals. It's an adopted goal, by the City council. So, when the question comes up on whether we can change these goals, it's clear that there is a bigger process we need to address. The other question is should the MRF be part of the SBP baseline? It was not part of the last Solid Waste plan but there was a specific process we went through to study it, as it is an important step to take to address tonnage we're missing to reach these recycling goals.

Luis said the challenge is going to be how to set aside money now to begin studying/researching these. He noted that if money is not reserved for research, SPU will not be able to tackle these challenges when they begin the next Solid Waste Plan.

- o **Committee member:** What does RPA stand for?
 - **Answer:** Recycling Potential Assessment (RPA) Model.
- o **Committee member question:** Can you explain how waste prevention is factored into generation total?
 - **Answer:** It is factored in, in terms of the aggregated total. We know that in the beginning we have X tons, and in the end, we have X tons. We can't say it's entirely related to our programs though. Statistically, we try to consider other variables such as economy or trends. We do the statistical analysis to determine which fraction is

part of our program. Waste Prevention is one of the more challenging to measure and to credit to the program and not to changes in the economy or other variables.

4. SWAC 2017 Planning

Officer Elections

Natasha will send an email this week to make officer nominations within the next 7 days. Sheryl noted that Officers would have the support of Segó, Sheryl, and Natasha in their role. She also noted that SWAC could return to the Co-Chair model, if needed. The process outlined is as follows:

- **Monday Nov. 14th**: nominations due to Segó on or before 11/14
 - **Monday Nov. 21 and 28 (if needed)**: Segó will contact members to let them know of their proposed nomination, explain a bit more about the role, and to confirm their interest in being nominated.
 - **Tuesday, November 29**: Statement by nominees due to Natasha and Sheryl
 - Tuesday Nov. 29: Natasha will email SWAC members announcing the confirmed nominees and their statements. The ballot that will be used at meeting for voting will be attached. For those unable to attend the meeting, absentee ballots will be due to Natasha on Tuesday Dec 6.
 - **Wed., Dec. 7**: Officer elections (by paper, in private).
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- o **Committee member**: Is there a tradition of people moving through the slots?
 - **Answer**: Not necessarily. We would encourage someone who's been on it for a while, to allow someone new to share their perspective.
 - o **Committee member comment**: I would say it's nice to have Officer experience before being chair, but it's not a requirement.
 - o **Committee member comment**: Any questions on roles, current officers would be happy to discuss it.
 - o **Committee member comment**: Feel free to self-nominate. If it's a season in your life where you have the time, take the opportunity. Everyone here is qualified.

2017 Workplanning

SWAC Chair Chris Toman provided print-outs of the 2016 workplan, and explained that the December SWAC meeting would encompass the majority of the 2017 workplanning prep. Chris said he may or may not be leading this conversation in December due to his personal schedule, and stressed the importance of Committee member attendance at the December meeting. He then reviewed the basic outline of the 2017 workplanning process:

- At the end of each year, we sit down and break down topics by categories (ex: What's a LOB? what are things SWAC are just generally interested in? What are updates SWAC usually gets?) Then break into small groups and discuss what could be 1) a short update 2) things to focus on 3) things that could be done online.
- Feel free to add / bring other ideas to the meeting. That helps Officers put together the agendas throughout the year. We go through workplan at our Officers meetings and it's very helpful. As Segó mentioned, we do have a theme going for the next couple months:

Measurements, metrics and goals and factors that impact our goals.. We have some ideas on doing presentations on demographic changes, effect of MF changes, and other topics like that. If that appeals to everybody, then we'll see if that resonates in the December meeting. If you have other related topics that should be addressed in the next couple months, that would be encouraged.

Sheryl: We also talk with Ken and see what's on the SW / SPU radar for learning opportunities. Those will go on the workplan, as well as where we're going with the SBP, as well as RSJ training opportunities. As well as charter 4 events requirement. How are we going to accomplish that – individual activities, or should we map those out? Are there topics/neighborhoods that could have the biggest impact?

- **Committee member question:** So, at the next meeting we'll divvy up and do that more?
 - **Answer (Chris):** Yes. Some of the 2016 topics will probably repeat, such as tonnage updates. Some are standard, but don't have to repeat. Last year we focused on MF.
 - **Answer (Sheryl):** Last year we generated a topic-specific document, a bucket list. That will be especially helpful for new people.
 - **Answer (Chris):** **We will have that printed out for folks at the next meeting.**
- **Committee member question:** Where did we land with field trips?
 - **Answer (Sego)** I had a grand plan that hasn't panned out. If we could get some feedback in December. For sure NTS. Would be great to go to Ballard brewery afterwards and see their Horse Anaerobic Digestion system. Not sure if it's compatible with a SWAC meeting at NTS. Need to discuss if it's realistic to have one of the SWAC meetings at the station, or if you want to have a field trip (while it's operating? Or after it's shut down so you can walk all over the place?)
- **Committee member comment:** I like the idea of combining field trip / meeting. Given busy schedules. I know for my schedule it would make sense to visit the transfer station at the end of the day, while its operating. And wherever there is a place with a table, have a meeting on the same night.

5. Around the table

- **Committee member comment:** I want to impress upon SWAC members how urgent it is that SPU re-translate their flyers. Just gave a presentation yesterday. Got feedback from interpreters that the flyers was written in a goofy way, like it was put through Google translate.
 - **Sheryl asked the committee member to please send us more details on this document.**
 - **Committee member comment:** Usually you want to have an interpreter re-translate a document back into English (so have two translators)
- Sheryl provided the following updates:
 - 11/16 is our All-CAC Meeting. Will be having our Climate change presentation, as well discussing the SBP outreach plan for the public.
 - 11/15 is National Americas Recycle Days. There will be 7 booths at 7 grocery stores, one in each councilmembers district. Stores have not yet been determined. It goes from 11AM – 7PM. **If anyone's available /interested, let Sheryl know.**

- Bidding farewell to SWAC member Joseph Ringold.
 - i. Joseph, who joined this meeting, said he will always think from the perspective of a SWAC member and will miss the experience and meetings.
- 11/15 & 11/16: Washington Organics Recycling Conference. Heather said she will provide a debrief of the conference in December.

Adjourned 7:35PM