

**KING COUNTY SOLID WASTE DIVISION
CEDAR HILLS REGIONAL LANDFILL COMMUNITY MEETING
WEBINAR VIA ZOOM
October 13, 2021, 6:00 p.m.**

Kathy Hashagen, Project/Program Manager III, Solid Waste Division, welcomed everyone, reviewed the agenda, and facilitated the meeting.

She noted that similar questions may be grouped together, and asked people making inquiries to please keep questions concise. Hashagen then introduced division director Pat McLaughlin.

SLIDE PRESENTATION

- The slides for the presentation summarized below can be found along with previous meeting notes on the [Cedar Hills Regional Landfill community meetings page](#).

Pat McLaughlin, Director, Solid Waste Division (SWD): Landfill Overview

McLaughlin welcomed the attendees and noted that we hold these meetings twice a year as an opportunity to share what is going on at the landfill and to hear feedback and answer any questions about the facility and its operation.

He provided an overview of the agenda noting that the attendees would be hearing from Bio Energy Washington about its gas-to-energy work, and how operations have been going during the past year.

He also noted that there would be updates on the construction and environmental monitoring taking place at the landfill, as well as some new technologies being evaluated to enhance work at the site.

McLaughlin shared a brief background about the Cedar Hills Regional Landfill noting that it is the last remaining landfill in King County. It was opened in 1965 and is 920 acres, or about 1 ½ square miles. Only 31 acres of that space is still actively being used.

He shared that the Solid Waste Division serves a large and growing population in our county. Each day, approximately 2,500 tons of waste is delivered to Cedar Hills Regional Landfill from eight transfer stations and two drop boxes.

He spoke about the evolution of technology and operations over the decades at the site, noting that they partnered with Bio Energy Washington in 2010 to take methane gas generated by decomposing garbage at this site and turn it into natural gas.

He shared the County continues to evaluate new ways to improve operations and reduce environmental impacts and they are looking ahead to the future to identify ways to pull more reusable goods from the waste stream and limit climate impacts from what remains.

He shared that he was grateful to have the community's input and partnership and the Solid Waste Division is available to respond to concerns 24/7 at 206-477-4466.

Kevin Singer, Plant Manager, Bio Energy Washington (BEW): Bio Energy Update

Singer provided an overview about the gas-recovery process. He then noted the hotline information for people to report any concerns related to BEW, including smelling natural gas: 425-392-3918. If there is an emergency, call 911.

- BEW was audited by Labor & Industries and there were no findings. In terms of safety issues, one employee injured an ankle due to a misstep off a concrete pad.
- No environmental exceedances occurred over the past 12 months. COVID-19 has had minimal impact on the operations.
- No significant modifications or changes are planned that would adversely create noise, odor or the community, and BEW continues routine maintenance to manage assets.
- The BEW plant is staffed 24 hours a day.
- The plant has achieved 93% uptime in 2021; the main cause of downtime is loss of power due to outages.

Laura Belt, Engineer, SWD Facilities Engineering and Science Section: Construction and Environmental Monitoring

Engineer Laura Belt then gave an overview of activities over the next year.

She started with the progress on the site development plan for the expansion of the landfill and noted that the Final Environmental Impact Statement (EIS) is underway and will reflect comments received on the draft EIS. She then discussed the facility relocation project now in planning to move employees off site to build new support facilities.

- Construction of tie-in between Area 7 and Area 8 is underway this fall, will wrap up soon ahead of the rain, and will resume in the spring.
- Work is ongoing on covering Area 7, which recently closed.
- Reforesting the buffer on west side - Developing schedule now, including community feedback period. Process will include some deciduous tree clearing, removing undergrowth, replanting new evergreen trees, which should provide better visual and noise barrier than the deciduous trees.
- Ongoing groundwater monitoring includes 48 groundwater monitoring wells throughout the site.
- Water level and quality regularly checked by staff and quarterly and annual reports are issued on the results. Current results are consistent with past results.
- Continuing work with Dept. of Ecology to implement recommendations on the east perched zone (area impacted by past landfilling). The east perched zone is an area of shallow groundwater on the east side of the property.

Scott Barden, SWD Assistant Operations Manager: Landfill Operations Update

Scott Barden then discussed new cover technology for active areas of the landfill. Daily cover is used to control pests and odors. SWD is considering use of an alternative daily cover material called EnviroCover, a non-reusable geosynthetic film made of polyethylene. Advantages are that it controls gas and water, saves airspace, and operations can continue the next morning. The product has received mixed reviews, with a Utah landfill reporting good results, and a California landfill reporting no improvement. King County operations staff want to see the product in action but are currently restricted from traveling to sites where EnviroCover is used due to COVID-19.

King County is also requesting approval from Puget Sound Clean Air Agency to use a mobile odor control system manufactured by Byers Scientific that uses *Ecosorb*, which is a vapor that bonds with odor molecules and chemically reacts to neutralize them. SWD would like to acquire two units.

SWD is currently wrapping up vegetation and erosion control ahead of the rainy season and will also look at resuming in-person landfill tours which have been suspended because of COVID-19.

QUESTION & ANSWER SESSION

Note: Some related questions from different attendees have been combined

Questions for BEW

Is BEW's still the largest landfill gas to energy processing plant in the US?

There are various types of facilities--a lot of information can be found in the Environmental Protection Agency's [Landfill Methane Outreach Program](#). BEW remains in the top three to five converting landfill gas (LFG) for energy. There are a couple of larger plants located in California.

Has production of methane decreased due to the lack of water this summer since water is a catalyst to increased methane production? Do you have monthly reports of gas rec'd?

No. And yes, we do keep monthly records of gas received. *(These reports can be found on the King County website)*

Since landfill gas only contains 50% methane, what happens to the rest of the LFG components?

The other components of the LFG consist of CO₂, nitrogen, and oxygen. CO₂ is sent to an oxidizer; nitrogen is hard to remove, so we use methane containing nitrogen to power part of our facility. Oxygen is converted to CO₂ and water and goes into the pipeline. Sulfur is bound to carbon-based media.

Questions for SWD

Final "tarp" on Area 7 - does that mean it has been sealed like Area 4 or is it just a "tarp" like on Areas 5 & 6?

It is a final sealed cover consisting of 60 ml high-density polyethylene.

You said the Ecosorb neutralizes rather than masks [odor]. Does that mean the previous mitigating controls you were using were masking the odors?

No, we have not used anything to mask odors. The Odor Boss we have used does essentially the same thing as the Byers equipment, but with water, and has a smaller capacity in terms of area covered.

If the Odor boss does the same thing as the new EcoSorb system, why change?

The Byers equipment does not use water and is able to cover a larger area, giving us more options.

Will SWD share the odor technology with Cedar Grove Compost?

If it is as effective as we anticipate, we will be happy to share that information with them.

Vertical gas collection pipes were installed in Area 7 because of sagging horizontal pipes and water in the pipes. Were you measuring the fugitive gas in this area? If so, how much do you estimate was released into the atmosphere?

We monitor the emissions and concentrations; we do not measure the volume of gas that flows through. When our monitoring detects methane about the prescribed action levels, then we mitigate or correct the issue as required by our air permit. Even though we are not required to mitigate an issue unless the methane exceeds 500 ppm, we mitigate or correct issues whenever our monitoring detects an exceedance of [100] ppm of methane.

Don't the regulations also state that you don't have to monitor dangerous areas, such as the active area, steep slopes and areas where large machinery is used. Did exception include Area 7?

The regulations allow us to not monitor dangerous areas, however, Area 7 is not considered a dangerous area, so we have been monitoring there. The regulations do not require us to monitor the active area.

You've stated, in the last community meeting: We are currently conducting additional air quality/odor monitoring and a health risk assessment to address comments received during the public comment period of the draft Environmental Impact Statement on the Site Development Plan and Facilities Relocation project. When you did additional air quality/odor, did you correlate it with any odor complaints?

We have been monitoring at potential sources and out in the surrounding communities but have not identified correlations; we do have results that can be evaluated for any correlations. We have adjusted monitoring times to coincide with times the landfill neighbors filed odor complaints, and we are also trying to make correlations with the weather.

The Zero Waste goal depends mostly on the consumer to recycle. What exactly will KCSWD do, besides "education" to make Zero Waste a reality?

There are good opportunities for partnerships to achieve Zero Waste. Seventy percent of what goes into the landfill does not belong there and the majority of that is food waste. That is a resource, and to make use of it, we need partners. With food waste and fiber, we are getting ready to invite partners to help us turn those resources back into the economy. Also, at our transfer stations we are actively directing people to the recycling areas and transfer station operators are separating out materials such as cardboard, metals, and pallets for recycling.

Do you have specifics of exactly where our recycling goes, what it is used for, how much is contaminated? Can you be transparent for this on your website?

Recyclable materials are an open-market commodity. The same haulers collecting your waste take your recycling. King County does not control where the recyclable material goes; the best source of information on that is the hauler who is handling your curbside pickup. They do not report to us, but to the Department of Ecology, including with regard to contamination.

Why is only such a small percentage at the new transfer station dedicated to recycling? I participated in the workshop. Very different from highly efficient EU operations i.e., Recycling Centers. Recovering materials at the transfer stations by trying to sort is inefficient and low quality.

We agree, recovery at the transfer stations is indeed a last-ditch effort. These materials should have been sorted earlier in the process and there should be less of them in the first place. Our best approach is prevention, then proper separation at curbside.

At the last meeting you said there are no landfill operations after 5:30 p.m., but there are trucks arriving and moving onsite. What are those trucks doing?

Those trucks are second-shift drivers coming from the transfer stations, parking trailers holding garbage that will be tipped into the active garbage cell in the morning. In addition to trucks coming onsite, the shop is still active, with a lot of maintenance being done in the evening and as late as 11:30 p.m. Landfill operations—i.e., processing of waste, stops at 5:30.

When will the Site Development Plan FEIS be released?

We expect that the FEIS will be released in the First Quarter of 2022.

The Greater Maple Valley Unincorporated Area Council submitted substantive comments (95 pages) on the Draft EIS. We exposed significant deficiencies, misstatements, misrepresentations and pertinent oversights. In order to build an authentic foundation upon

which such enormous decisions regarding the future of the CHRLF are to be made, herculean steps need to be taken to move this EIS from “Draft” to “Final.” As KC SWD prepares the Final EIS, it has not contacted the GMVUAC on anything we submitted. Why?

We have reviewed your comments and will contact your organization if we have any questions.

Since the Final Environmental Impact Statement (EIS) won't be done until First Quarter of 2022, does this affect the timeline for Area 9, if that is approved? Will you be moving forward with Area 9 even without a Final EIS? When would you actually start construction of Area 9?

We are doing preliminary planning for Area 9 but would not begin evaluation of a construction timeline until the EIS process is complete. Depending on the findings of a final EIS report, we would begin that work then.

What is the status of relocating support facilities in support of the proposed Area 9? Has a new location been identified?

Three locations are being considered for the permanent relocation of the support facilities, but we will not make a decision until the EIS is complete.

What will happen to Cedar Hills when the Biden administration finalizes methane emission reductions from landfills as landfills have been recognized as one of the three major sources of methane emissions in the US and landfills of untreated waste like in the EU will no longer be possible?

Any decision of that nature would have to be made after legislation is passed.

Can Cedar Hills be more proactive in cleaning up the gravel and debris spilled onto the Cedar Grove Road when KC trucks turn south on the Cedar Grove Rd from 228th Ave SE from the Landfill?

Yes, we used to do sweeping and can do so again.

I live on Lake Desire. Last month, for a few weeks, there was a strong odor particularly at night. Any thoughts on why?

We don't know, but in the future, please contact the 24-hour hotline at 206-477-4466 to report that kind of issue, and then a member of our landfill gas crew can respond and investigate the possible nature and source of the odor.

Meeting adjourned at 7:00 p.m.

Attendees

King County Solid Waste Division Staff

Annie Kolb-Nelson

Dan Swope

Danielle Hursh

Glynda Steiner
Isabelle Trjillo
Janine Blaeloch
Jennifer Devlin
Kalyn Brady
Kathy Hashagen
Kinyan Lui
Kris McArthur
Laura Belt
Margaret Bay
Mark Monteiro
Nick Harbert
Pat McLaughlin
Scott Barden
Teresa Atkins
Theresa Thurlow

Other King County Staff

Darshan Dhillon
Frank Marquis
Marissa Alegria
Stephanie Knightlinger

Bio Energy Washington (BEW staff)

Kevin Singer

Department of Ecology Staff

Alan Noell
Evan Dobrowski
Nancy Lui
Tim O'Connor

Interested Parties

Chuck Packard
Diana Cyr
Dot Doe
Edie Jorgensen
Heather Trim
Jane Schrader
Janet Dobrowolski
John Olson
Josephine Bayan
Karen Dawson

Laura Moser
Linda Johnson
Main Pastucha
Peter Rimbo
Phil Reimer
Philipp Schmidt-Pathmann
Rick Reiningger
Rob Jones
Ron Hehmen
Steven Van Slyke
Sue Neuner
Toni Washington
Val Paganelli
Valerie O'Halloran