

**Cedar Hills Regional Landfill
Spring 2024 Community Meeting Summary Minutes
Sept. 18, 2024
In-person Presentation, Maywood Middle School**

Facilitator Kalyn Brady opened the meeting. Speakers included:

Pat McLaughlin, Solid Waste Division Director

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Laura Belt, Solid Waste Division Supervising Engineer

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Scott Barden, Assistant Operations Manager at Cedar Hills Regional Landfill

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Introduction

Pat McLaughlin welcomed everyone and shared that he and the speakers would be sharing information about operations at the landfill, work that has been completed since the last community meeting and construction that is underway right now. McLaughlin shared his excitement to have this meeting and expressed gratitude to all those who came.

McLaughlin introduced the Solid Waste Division (SWD) Deputy Director, Chris Stubbs.

He shared that it is a busy time for the division as it develops Area 9 and as Cedar Hills staff settle in at new facility locations to support that expansion. He shared that the division is beginning work on its comprehensive plan, which will help determine a long-term disposal option for materials once the landfill is closed. McLaughlin noted that transitioning to a new method of handling waste is an enormous undertaking that requires working proactively, in partnership with municipal partners and County leadership, to ensure the best alternative to serve the people of King County are found.

He noted that the division is very focused on Re+ to reduce the amount of garbage that needs to be managed and that the next disposal method will be more expensive and more environmentally detrimental, so we need to do more to reduce garbage that needs disposal.

He shared that 70% of what goes to the landfill does not belong there and that while doing long range planning, the division is looking at policies and partnerships to get what doesn't belong in the landfill to where it does belong.

McLaughlin directed the audience to a QR code on screen that leads to an infographic that describes SWD's work to be stewards of the environment and community.

He noted that SWD is committed to being a good neighbor, protecting the environment, and maintaining the safety and health of employees at King County and to respond to concerns at any time of day or night. He directed neighbors to call the customer service number provided on the slide if they had any concerns and that it is staffed 24/7.

McLaughlin shared that a Q&A period would take place after the presentations and encouraged the audience to ask questions or share thoughts. He noted that if the meeting time concluded before all questions had been answered or if additional information was needed, those answers would be posted to the website in the weeks following the meeting. He encouraged the audience to use the sign-up sheet at the front desk to provide their emails for alerts about the landfill.

McLaughlin handed the mic off to Laura Belt.

Construction and Environmental Monitoring: Laura Belt

Belt shared that Solid Waste successfully installed 18 dual-phase wells in January and is learning how to operate the new gas system. Dual-phase wells allow SWD to pump liquids that accumulate in the landfill and send gas out as well. She noted that SWD is working with another consultant team to identify optimal locations for installation of approximately 50 additional wells set to be drilled next summer.

Belt shared that SWD signed an agreement with Sniffer Drones and monthly flights began in July. Information from the flights is used to identify problem areas and take corrective action. She noted that evaluations of gas flow continue daily, and that SWD hopes it is improving the experience for everyone and helping with landfill emissions.

Belt mentioned that SWD is looking into arsenic treatment options to address arsenic in the wastewater that is discharge to the King County wastewater system. Initial pilot testing is planned to start in the winter.

She noted that construction was unable to begin this year on Area 8 and 9 due to issues with the bidding process. The body of work is being adjusted to include next year's work and will go to bid early next year. Staff is putting on a temporary cover of Area 8 and hydro seeding on the side slopes to get through the winter. SWD will be going out next summer to do the closure. This will include the beginning construction of Area 9 and moving the soil and offices that were vacated.

She noted that next spring, everyone will be in different offices and that there will be construction at the North Flare station and in the south. Construction of the interim offices will begin later this year and allow for Area 9 expansion. The work has been advertised. She also shared that there has been a delay in leachate lagoon and aeration upgrades due to addressing permits for working in the buffer.

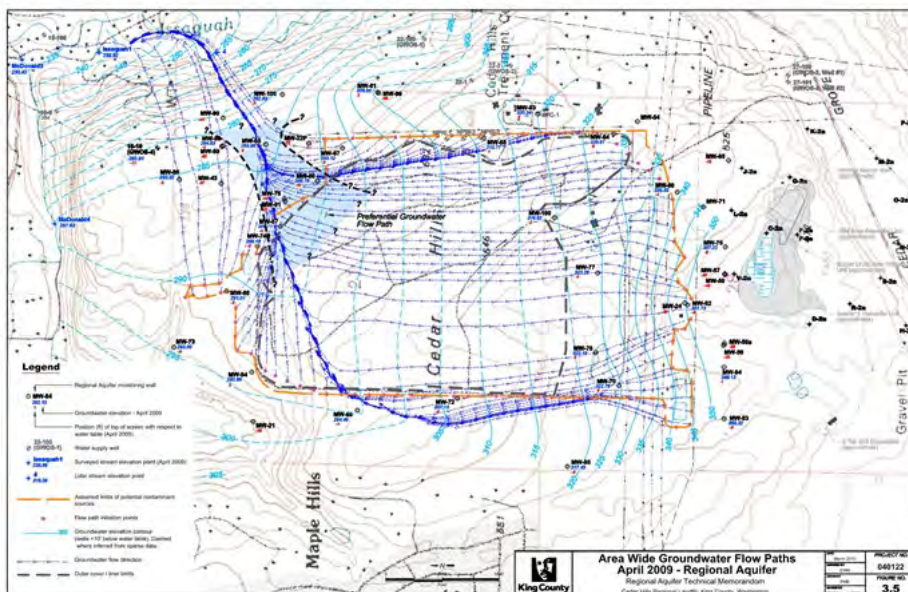
She shared that in 2025, Area 8 Stage 1 closure and Area 9 initial excavation will begin and that SWD will also be preparing Area 5 and 6 to receive waste, approximately by 2027. This is based on the current rate of garbage. She noted that the division would like to have it ready so that they can move into that area at the appropriate time and have the ability to use it earlier if necessary.

Bell shared that groundwater level and quality are tested quarterly and that the groundwater leaving the site is compliant and up to drinking water standards. There are 48 groundwater monitoring wells located throughout the site. Compliance concerns relate to the northeast corner, which is the direction that the groundwater flows under the site and exits. The wells monitored in the northeast meet drinking water standards. This means with all the flow occurring, there is a well that receives all of the flow and that well is consistently meeting drinking water standards. There are a few other wells that are also tracked that are also meeting standards. There are some wells along the site that do not meet standards, and SWD has discovered that they need to be replaced.

Belt shared that there is a filter pack that filters out solids and SWD has discovered that it is no longer filtering the solids, and, in some cases, the filter pack is ending up in the water. SWD will be redrilling those wells either late 2024 or in Q1 of 2025.

She noted that SWD continues to monitor the perched zone and is working with Ecology to implement recommendations (area impacted by past landfilling). A hydrogeology consultant was hired and has begun evaluation for updates to hydrogeology report. SWD will be implementing consultant recommendations for the decommissioning and replacement of ground wells on site.

Belt turned the mic over to Scott Barden.



Landfill Operations: Scott Barden

Barden shared that the fall public tour will be on Oct. 5 at 9 a.m. and that residents can visit kingcounty.gov/cedar-hills to sign up. He noted that there has been a lot of change at the landfill and that if attendees haven't been in a while, they should come and see.

Barden shared that the Shop and Stores moved to Renton, which is a huge undertaking, and that SWD has never had a separation between operations, the trucks and the shops. He shared that trucks will be

domiciled next door, and many of the facilities will be at the North Flare Station to make room for Area 9.

He shared that the initial work on the east buffer property deconstruction has started as part of a training program. All but one property is set to be deconstructed by the end of 2024. The deconstruction is under one contract and there will be a separate contract for native vegetation restoration in 2025. In the meantime, SWD will be covering the deconstruction areas with straw for erosion and dust control. Additional work to complete deconstruction is slated to begin later this fall.

Barden turned the mic over to Kalyn Brady, who set the ground rules for the Q&A.

Question and Answer Period

In reference to the groundwater flow map, what are the surface water flows and what is the depth to groundwater?

The depth to groundwater varies across the site but in general is about 300 feet below the native ground surface. (A flow map of the landfill was shown to the audience to demonstrate the approximate location of the surface divide, with flows to south and north.) To the north it ultimately discharges to Issaquah Creek, to the southeast it discharges to a ditch along Cedar Grove Road, and the southwest area discharges to a wetland in the south and to the Queen City Farm property. Where it discharges to the ditch on Cedar Grove Road, the furthest SWD staff have seen it travel is 10 feet in the ditch but theoretically it could flow down to the Cedar River.

There were discussions about airborne arsenic levels. What is the timeline for getting Best Available Control Technology according to PSCAA? What is being done to mitigate risks in the meantime?

The Puget Sound Clean Air Agency (PSCAA) is the SWD air permit regulator and emissions are their purview. SWD is actively working with PSCAA to ensure that appropriate testing and modeling is used to determine exceedances at the fence line. UPDATE: The following list provides a chronological timeline of the testing and reporting:

- 2023: SWD initially reached out to PSCAA last year in response to increased landfill gas flaring. SWD wanted to ensure appropriate steps were being taken to maintain compliance with the Air Operating Permit for Cedar Hills.
- November 3, 2023: In response to SWD request, PSCAA issued an Administrative Order on requiring evaluation of potential airborne arsenic emissions.
- January 2, 2024: SWD submitted a modeling protocol and preliminary emissions assessment to PSCAA, including a request for time extension to May 21, 2024.
- January 26, 2024: SWD completed stack testing for flare emissions and landfill gas composition.
- February 2024: Site-specific testing of the landfill gas was completed.
- March 2024: SWD completed ambient air sampling near the leachate lagoons.
- May 21, 2024: SWD submitted the Toxic Air Pollutant modeling report and best available control technology (BACT) analysis to PSCAA.
- July 2024: SWD completed ambient air sampling at lagoons and at the fence line and began review of the draft results report.

- August 20, 2024: SWD received notification of incomplete information and deadline for submittal thereof.
- September 30, 2024: SWD submitted the response to the incomplete information notification to PSCAA.

SWD will continue to work with PSCAA to get to a determination of the appropriate next steps and will continue to share information when available.

In the near term, SWD has asked employees to wear airborne arsenic monitors, as they are actively working right next to these facilities. They have worn the air collection monitors for the duration of their entire shift and the results are collected and monitored. SWD has never detected arsenic above permissible limits and it has an interest in protecting employees and the community. SWD will continue to lean into this. The division's goal is not just to meet the standard but to exceed it, as it has historically done to protect public health and the environment.

How can the community remain informed about SWD's additional work with PSCAA regarding airborne arsenic?

Attendees are encouraged to sign in with contact info so information can be shared by phone, email, mail, etc. when it is available.

The arsenic report said that they couldn't test the flare emission dispersion. What is the status of covering the leachate ponds?

For the enclosed flares, SWD is able to test the exhaust gases and regularly test the flares for compliance with the Air Operating Permit. This has been done for many years. SWD tested the exhaust from the flares to determine arsenic loads. However, the two open flares cannot be tested the same way. PSCAA has asked SWD to do modeling based on the inlet system only. SWD needs to determine the appropriate modeling number.

SWD is working on a design to cover the leachate lagoons as part of what tour efforts address concerns at the leachate lagoons. To install the cover, SWD will need to change the aeration system. This is needed to aerate and oxygenate the leachate to meet requirement from KCIW and the current floating aerators are not compatible with a cover. This change will require SWD to have a larger building to accommodate support for the new aeration system. SWD proposed placing this building in the BPA easement, but BPA said no. An alternative location will need to be identified, likely in the buffer. This is an active project.

Do you have a small area to do research and development on solutions for removing arsenic from leachate and is there a way to bring experts and scientists in to do this?

The SWD engineering team has partnered with consultants and the University of Washington's engineering program to understand potential treatment technologies to treat the leachate and remove the arsenic.

Can you elaborate on the procurement problems of Area 8? How are the problems eliminated and what is the timeline?

There were steep requirements in the request for proposal (RFP) that the potential bidders couldn't meet, so SWD will have less steep requirements for the next RFP. SWD designers are reworking the documents and plan on re-issuing an RFP in mid-January 2025.

How are our water wells designed to promote clean water?

There is a filter pack around the well that is designed to keep large particles out of the well. When the filter pack fails, and particulates get into the well, metals can be dissolved or attached to particulates that would be captured in the sample. SWD's focus is about what ends up in the drinking water system, which would exclude the particulates.

Why isn't BEW here tonight?

This is a public meeting and BEW apparently elected not to attend.

Why are we considering building in the buffer for the lagoon upgrades and not somewhere else? Is there a special use permit?

SWD is proposing building in the buffer because there is not space elsewhere. Any proposed construction in the buffer will go through a Special Use Permit process.

Are you running into trouble with BPA with the easement relative to the lagoon upgrade project?

SWD is not having problems with Bonneville Power Administration (BPA) regarding the easement, but BPA is concerned about providing electricity and their future ability to build new capacity and future expansions. They are being cautious on what goes into the buffer and how hard it will be to build around.

What's going on with the relocation of the shop maintenance facility into the buffer?

The relocation of facilities in the buffer is in the permitting review process. The permitting division has made several requests for information and SWD has responded.

18 dual phased (gas/water) wells were installed – what are the locations of the wells on the site?

The landfill gas extraction wells will be in the garbage in lined areas 4, 5, 7. They are all are connected to the landfill gas collection system.

Is the timeline for covering the leachate lagoons a few years out?

The project team is discussing options for the cover and that SWD has only known for about a month that the BPA easement can't be used. SWD is in the process of evaluating different options. Anything between the road and edge of the landfill is buffer area. There are ponds and BPA's easement covers near the ponds. SWD is struggling with limited space and where to place buildings.

Can you test the air for arsenic in the surrounding communities? Are there air samples other than models?

SWD will explore options that may further inform potential impacts to surrounding communities and share its findings when available.

How were biosolids impacted from Cedar Hill’s discharges to South Plant? After the Loop is created, is it full of arsenic?

The Wastewater Treatment Division (WTD) monitors their biosolids. The leachate from our system goes to the South Treatment Plant and SWD is monitored for arsenic loading, meaning the volume of arsenic that is allowed in our discharge. While SWD was out of compliance at times in 2024 due to BEW’s plant condensate, staff is unaware of any impacts caused to the overall South Treatment Plant. SWD has come into compliance since BEW stopped operating because their condensate (wastewater) was identified as a source. SWD has put technology in that will allow BEW to divert wastewater that exceeds allowable arsenic levels on site. It will no longer go into the leachate ponds. WTD monitors and treats for a number of pollutants on their end that ensures the quality of their Loop product.

When arsenic gets into the solids, it builds up. What comes out of the plant might be a small amount, but is there still a lot?

WTD is responsible for monitoring their biosolids.

What sensitivity do younger people have related to potential health impacts from the accumulating chemicals?

SWD turns to regulators such as Public Health, Ecology, PSCAA to comply with permit requirements that these agencies developed. Compliance with regulatory permits is key to people’s well being.

Why are the leachate ponds in the buffer? Was it permitted that way?

The leachate lagoons have been here for a long time. SWD staff do not know how the decision was made to locate the ponds there and has found no documentation behind that decision.

Is there a particular grid that the drones follow when monitoring landfill emissions?

The drones have a set path similar to the serpentine pattern that is used for on-the-ground monitoring.

The sniffer drone technology goes above and beyond regulatory requirements. Serpentine monitoring is required once per quarter. With the sniffer drone, we are doing it monthly.

Are any of the results online?

No, however the results can be received via a public records request.

What does the sniffer drone test for?

Methane. The regulatory limit is 500 parts per million (ppm). Anytime there is a detection above that limit, SWD investigates. The only detections above 500 ppm were in Area 8, which is why SWD is installing a temporary cover with tarp on one side and mulch on the other and is working on longer-term construction of a permanent cover. This will allow SWD to also open up the gas wells and collect gas better.

With the drone and our quarterly surface monitoring, SWD monitors at 100 ppm.

Do you have the technology ready to go to capture wastewater that exceeds arsenic levels from BEW plants?

Yes, it exists, but it's not currently needed because BEW is not operating. Because the primary source of the arsenic exceedances is found in the plant wastewater, and the plant wastewater isn't being created, SWD is not having exceedances.

When SWD started to see these high levels of arsenic, staff looked all over the landfill and discovered that the high levels of arsenic were coming from the plant condensate. If BEW opened up tomorrow and SWD didn't require them to send it offsite, SWD might see arsenic exceedances in its wastewater. Right now, SWD is flaring gas, and needs to make sure that all wastewater discharges remain compliant. The best option is for BEW to resume operations and divert any of the nonconforming condensate off-site for proper disposal. This would allow SWD to stop flaring the gas and instead make this renewable energy available for our local communities.

Is there any future plan for odor control? Do I call to report strong odors?

Odor issues can sometimes occur. If neighbors experience odor, call the 24/7 line, 206-477-4466, and staff will investigate. He shared that staff do eight odor checks a day and two outside of the landfill in the community. The landfill will sometimes emit odors, and learning the sources can help SWD improve operations.

Residents are encouraged to call in odors so that they can be investigated.

What happens with temperature inversions? Do we think any landfill gas is captured in the inversion

That is a possibility.

Is the landfill cover complying with highest standards? Are you hiring a company to do some sort of testing of air in communities? Are we changing the requirements for the covers? Are they lessening?

The final cover complies with the regulatory standards. SWD does not have the authority to lessen the requirements. The Department of Health and Department of Ecology review the cover design prior to construction. Because SWD wasn't able to install the final cover this summer, staff are reinforcing the slopes this winter and then will replace it next summer. SWD will put plastic on the south slope and mulch on the east and west slopes to reinforce. These actions are also compliant with our regulations.

Does SWD have to use a drone for any area we can not manually monitor?

The only areas SWD does not monitor on foot are areas that are considered dangerous. Staff will either monitor on foot where ATVs can't be taken and are considering using the drone.

Comment Period

1. Comment from Hank Hayes from GVMCA about 1897 map of the area. There was a river that fed off a couple of lakes and a nice water way from Queen City Farm.
2. Comment from Leslie Morgan saying that the buffer was intended to protect residents when they established the landfill and after spending years working on this and saying that the public has input, it is very exhausting, and it makes people feel insignificant. This shows that SWD doesn't care about the community when they continue to try to go into the 1,000-foot buffer.
3. Comment from Hank Hayes about the movie "Trash" that can be viewed on YouTube by Jeremy Irons.
4. Comment saying that maybe keeping the landfill open until 2040 in the community is not the best for our environment.
5. Comment saying that when there is a problem, there is an effort to push it onto another community. There is a need to look at a landscape view and how everything rolls out.

Brady concluded the meeting and invited people to sign up for the newsletter and to take an informational card.

Meeting adjourned at 8:00 p.m.