Cedar Hills Regional Landfill Community Meeting
October 20, 2026

PRESENTERS:
Rebecca Singer, Director, Solid Waste Division (SWD)
Chris Stubbs, Deputy Director, SWD
Jennifer Keune, Environmental Science and Compliance Manager, SWD

Rebecca Singer welcomed the attendees.

UPDATES

Infrastructure updates

Director Rebecca Singer started the presentation

2026 construction projects:

- **4 Interior Header:** Started October 2026; Awarded to Road Construction Northwest, Inc.
- **Area 8:** Phase 1 closure substantially complete 2026. Lead contractor: Goodfellow Brothers, Inc.
- **Area 9:** Area 9 is the last available area left in the landfill
- Phase 1 development underway; first refuse expected 2031.
- Lead contractor: Goodfellow Brothers, Inc.
- **Area 5 and 6:** Work currently underway. These areas are left open as we develop Area 9.
- Lead contractor: Scarcella
- **Facility Relocation:** Temporary relocation underway due to Area 9 development, including staff and drivers. Lead contractor: Western Ventures.

Major asset rehabilitation:

- Leachate lagoon liner: Trenching and leak detection testing; no indications of issues
- Booster blower motors replacement
- Extensive site-wide stormwater maintenance
- Pump Station 1A pump replacement
- Main haul road safety improvements
- HDPE pipe recycling throughout site
- Vault lid replacement, State Route169
- Leachate line air vac inspection and replacement
- North Flare Station: Refractory replacement; tip replacement; metal recovery from old tips equaled approximately 800 lbs.

Priorities safety for the surrounding community and compliance with regulations.

Projects under design & study for 2026

- Site-wide hydrogeologic study: Where is all the water moving?
    - Flooding in Nov. / Dec. 2025 demonstrated that we need a better understanding of where water is headed as it leaves the landfill, ensure we have the correct trenches and containment, and capture water that needs to be treated. We want to ensure our understanding of the site's water flow matches the findings from the previous study.
- Arsenic removal from leachate and condensate: SWD is working with Wastewater Treatment Division (WTD) to manage this. Concentrations of arsenic at CHRLF are low, but we want to ensure they stay that way.
    - Implementing a membrane bioreactor (MBR) pilot project to treat leachate and assess whether we can remove other contaminants in addition to arsenic.
    - This technology is used at Brightwater Treatment Plant.
    - As regulations evolve, we know there will be additional contaminants we are required to contain, so we want to see what MBR technology can provide.
- Leachate lagoon improvements: Manage, treat, and discharge leachate onsite.
- Leachate conveyance line condition assessment: Ensure that pipes do not corrode and remain in good condition.

Eastern property acquisition

- Three additional parcels purchased in 2026
- SWD exploring fencing options for newly-purchased properties
- Demolition of remaining homes planned for early 2028
- Nighttime patrols at newly purchased properties
- Ditch maintenance and culvert cleaning plan on the schedule

Environmental compliance updates

Jennifer Keune started the presentation

Monitoring – Landfill Gas:

- Methane is potent, so we want to ensure we are collecting it efficiently.
- Landfill design includes the capture and conveyance of landfill gas.
- We are required to monitor surface emissions to ensure that the cover system is containing the greenhouse gas / methane is generated from the natural decomposition process.
    - Every quarter, our staff traverse the landfill, covering 600 miles at the landfill as they monitor emissions per requirements of the Environmental Protection Agency (EPA) using handheld monitors held close to the ground.
    - These monitors are looking for spikes in methane concentrations, which would indicate a compromise in the cover system.
    - Corrective action is required for any detection over 500 parts per million (ppm)

- There's a timeline to complete those corrective actions, which may include
- either fixing the cover if it is damaged, or adjusting the vacuum within the gas piping system s.

Diagnostic drone monitoring

- For the last couple of years, we've augmented the walking with drone monitoring. This uses sensors and covers ground much faster than the Landfill Gas Technicians are able to do
- There have been decreases in emissions in 2026.
- We have also employed methane monitoring and thermal imaging via drone
- After several rounds of imaging, we didn't gain any new insights and likely won't continue night or thermal drone monitoring.

Environmental compliance

Puget Sound Clean Air Agency (PSCAA) Administrative Order on emissions

- PSCAA asked SWD to evaluate whether the landfill is contributing arsenic air emissions to a level which would be considered harmful.
- SWD employed a consultant to support this assessment, and the consultant reported that no other landfill had conducted research on this topic to this extent.
- In 2024, we collected samples and submitted a report with findings. PSCAA used the results of that initial study to decide the acceptable limits that would be applicable to Cedar Hills landfill.
- In 2025, we conducted another round of sampling and briefed PSCAA on the findings.
- We are now finalizing the report for this study and will transmit it to PSCAA by the end of October 2026. PSCAA will use this report to decide whether any further action is appropriate.

<u>The findings are summarized as follows:</u>

- Washington State law outlines a threshold called the Acceptable Source Impact Level (ASIL) for air quality, whereby an emission only up to a certain level is permissible. Exceeding it requires additional study because the chemical may pose a health risk. In our analysis, depending on how conservative the assumptions were, arsenic emissions from the landfill were close to this threshold. Because air quality regulations are conservative, SWD anticipates that PSCAA may require us to implement a control technology to limit arsenic emissions at CHRLF.
- Fortunately, these studies reflect the "worst case" scenario, and arsenic emission levels can only improve from here. The studies were completed in 2024 and 2025, when we were flaring all methane at our North Flare Station because the landfill gas-to-energy plant was not in operation. Arsenic is not destroyed with landfill gas is combusted, it passes through the flares. Now, we operate the landfill gas-to-energy plant and flare very little of our gas.

Underground storage tank removal

- Five underground tanks with a 600- to 10,000-gallon capacity were removed in summer 2026. The contents were diesel, motor oil, hydraulic oil, heating oil, and waste oil.
- Four additional tanks with a 4,000 to 20,000-gallon capacity will be removed in 2027. The contents are diesel and gasoline.
- During excavation of these underground tanks, we identified some soil contamination, which was expected. The soil from this excavation was segregated into three categories based on the level of contamination:
    - Unrestricted reuse, meaning it is not contaminated and can be used for any purpose.
    - Conditional reuse, in which we have approval from regulators to use this slightly contaminated soil as a daily cover material for the landfill.
    - Offsite disposal: Soil that is too contaminated to be used for any purpose .

Solid waste regulation rulemaking efforts currently underway:

- Solid Waste Handling Standards – Chapter 173-350 WAC
- Criteria for Municipal Solid Waste Landfills – Chapter 173-351 WAC
- Landfill Methane Emissions (fees) – Chapter 173-408 WAC
- Recycling Reform – Chapter 173-950 WAC

These are public processes and anyone is welcome to offer their thoughts and opinions. The Department of Ecology's laws, rules, and rulemaking web page shows all past, current, and upcoming rulemaking processes d. There is detailed information, including proposed changes, rulemaking timelines, and opportunities to provide input.

Operations updates

Chris Stubbs started the presentation

Landfill area

- SWD is currently filling Lift 8 of Area 8 East of the landfill. For this area, we will continue to fill to lift 11.
- In March 2027 we anticipate reaching Lift 10. We will then open Area 5 West.
- In early 2027, we are moving employees from the temporary work area to the permanent employee offices being established next to the North Flare Station.
- Stage 2 closures at Area 8 are upcoming, with odor-control measures in place. We have started closure early on Area 8, putting a liner over the top and tying it to the bottom liner of the landfill. This helps prevent rainwater from seeping in and generating leachate. It also prevents animals from carrying waste away and reduces methane emissions .

Battery-electric (EV) truck pilot:

- We are currently evaluating the performance of second-generation heavy duty EV trucks for hauling waste. We are awaiting delivery of the truck from Paccar.
- Ideally, we will be able to transition our tractors from diesel to battery-electric in the near future.

Cedar Hills Renewable Gas-to-Energy (CHRGE) Facility:

- We regularly switch out the hydrogen sulfide gas filtering media; contractor US Ecology takes the material away for safe offsite disposal.

Wastewater records moved to digital platform

- Allows for higher accuracy of records
- Helps better schedule preventative maintenance

Q&A Session:

Q: You mentioned a pilot project using MBR technology to capture arsenic from the leachate. Will this arsenic and heavy metals be discharged into the sewer system?
A: We are working with WTD to assess how many harmful materials we can remove from our leachate before it enters their system in order to make their job easier. Their facilities remove nitrogen from wastewater, so we are assessing whether we can do so. As the state further develops regulations, we're engaging with Public Health-Seattle & King County (Public Health) to determine how we can remain compliant and remove arsenic from the wastewater stream through MBR technology.

Q: Where are the three additional parcels located that SWD is acquiring?
A: They are located on the eastern side of the landfill. Purchasing these properties, which are within the 1,000-foot buffer zone of the landfill, will allow us to reestablish and maintain the required buffer zone.

Q: How do you assess the condition of leachate conveyance?
A: Conveyance lines are assessed with a scope--a video camera on a long line--that is pushed into the conveyance lines so we can see the inside of the lines and assess their condition.

Q: I live near the landfill on 230th and I can see one of the decaying properties that King County is working on from my home. It appears some plastic fencing was recently removed, but some was left behind that protrudes about 10 inches off the ground. It looks bad and is in disarray. Is there a schedule for removing this?
A: Solid Waste Division discovered this issue only this week. We are working on removing the remaining fence posts and will be addressing the rest of the fencing that was left behind. This should be completed between four to six weeks, depending on whether we must contract for the work or can complete it in-house.

Q: We are concerned about security around the properties King County is working on near the buffer zone.
A: We have resumed nighttime patrols around these properties to keep them safe and secure.

Q: Why won't demolition for the remaining homes be completed until 2028? You mentioned that it is a capital project, but purchasing seemed to occur quickly, so I am not understanding why demolition will take so long.
A: The deconstruction process for these homes is part of a broader capital project and has significant expense. Each year, we have limited funds for capital projects and must decide what takes priority. This project has been slated for 2028 based on our capital project schedule and available funds.

Q: Last year, Solid Waste Division said that it could not complete the leachate lagoon improvement work because the lagoons are on the BPA easement under the power lines. How will you complete this work now?
A: Yes, our mechanical and electrical equipment must be located near the leachate lagoons for us to complete this work, and because this is in the easement area, this work requires a permit. SWD is working with the County's Department of Local Services Permitting Division to obtain a Special Use Permit so we can move forward. We have submitted the documentation for the permit and are in negotiations with Local Services .

Q: The leachate ponds are located within the 1,000-foot buffer zone. Will you be expanding the leachate ponds?
A: No, we are not making the leachate ponds deeper or wider. We will be improving how leachate is circulated within the ponds, improving electrical and mechanical operations, and installing a cover system. We are also improving the liner systems. We test these liner systems regularly to check for leaks. We have never had a leak but know that over time liners must be upgraded so the groundwater remains protected.

Q: For Area 5 and 6 work at the landfill, will you be completing additional monitoring, such as air quality monitoring, since you have removed the seal? Will you put additional gas wells in, now that you are adding trash? How long will it be before these areas are permanently closed once more?
A: We are uncapping these areas so we can add garbage lifts – or layers. We are moving first from Area 8 to Area 5, then from Area 5 to Area 6, back to Area 8, then finally to Area 9. We are scheduled to move from Area 8 to Area 5 in March 2027. When we do this, we will continue monitoring for fugitive emissions, and we will keep temporary covers on the exposed areas to keep methane emissions down. We are also adding additional vertical gas wells. Final closure will be completed for each area as soon as it is full and before we move to the next area.

Q: Thank you for the great work King County is doing at the landfill. My question is this: As you have tried to establish baselines of methane emissions and other toxic materials, have you considered air pollution as a composite, and how methane is just one of many pollutants we are breathing, in addition to car waste and overall toxicity?

A: We would have to defer to the Puget Sound Clean Air Agency to answer questions about cumulative effects of air pollution from different sites. Our monitoring is specific to the landfill.

Q: Thank you for the presentation. From my house I can see a pipe that comes out of the ground and occasionally a huge flame comes out of it. What is this? Is this where the methane comes out? Can you sell this gas? Is this residual gas tested?
A: You are seeing the candlestick flare at our landfill gas-to-energy plant, known as the CHRGE Facility. This plant captures all gas from the landfill. About 70% of the methane is removed; the gas is treated and goes into the Williams Pipeline for purchase by Puget Sound Energy. The flare you see occurs when we combust some of the residual gas – called "tail gas" – from the collection system that cannot be processed. The CHRGE facility is also regulated by PSCAA and the Department of Ecology, so the gas at the facility is tested just as it is at the landfill itself.

Q: Can you elaborate on your experience with electric trucks and what the shortfalls were related to the immaturity of technology?
A: Two major areas: One, distance the truck was able to travel due to life of the battery charge. We couldn't have made a full day's worth of trips from transfer stations to the landfill. We piloted from our Enumclaw station because it's further and has elevation changes, using it as a robust vetting. The second issue was payload capacity. Trucks could only haul about 80% of total payload needed. The new truck we will be piloting has a longer battery life and a larger payload capacity.

Q: How much soil are you leaving on Areas 5 and 6 before you start top-filling?
A: We are leaving 12 to 24 inches of cover.

Q: Lawsuits involving the landfill show that active areas are not monitored. If you remove the cover from Areas 5 and 6, will you be monitoring the air and soil in these areas?
A: We will still maintain interim cover for those areas. We are also monitoring via drone and through technicians walking the areas. When we strip soil off the cover, we only strip the area we intend to fill right away. So, we strip, fill, cover, then move to the next portion. We do not uncover the entire area at once.

Q: Have you considered using spectral analysis to detect methane at the landfill?
A: The monitoring method used to detect methane at the landfill is determined by the US Environmental Protection Agency (EPA) and is a specific standard we must follow. We can use other technology, but from a compliance standpoint, we must follow EPA guidelines. In 2023, we were aware that new methane emission monitoring rules were coming, so we looked at five potential technologies, including spectral analysis. This test helped us determine which technology could deliver the quickest diagnostic results. We assessed that drone monitoring would be the most effective.

Q: Are your recycling programs successful in reducing tonnage going to the landfill?
A: The recycling rate has remained steady for the last few years. We are working with the Department of Ecology and Public Health on legislative changes to enhance recycling regulations in our region. For example, we would like manufacturers to take greater responsibility for packaging to make materials more recyclable and would like our commercial haulers to expand recycling options.

Q: How many tons of solids were removed from the leachate lagoons in the last 5 years? Where were they placed? Were they tested for PFAS and other contaminants? Will you post the results of these tests, yes or no?
A: Records going back five years indicate that no accumulated solids were removed from the Cedar Hills leachate lagoons during that time. Since no solids were removed, no testing or disposal occurred.

Q: Will Area 9 be the biggest pit? Why did you decide to just do one big pit and not two smaller pits? E.g. area 4 was a large pit and that was difficult. I'm nervous about having such a large pit and not getting final cover on it until 4 or 5 years. Interim covers aren't as good, right?
A: When we fill Area 9, we will fill it the same way as we filled Area 6. We will uncover a small area, fill it, put a temporary cover on it, move to the next footprint, and so on. This means that we will not have the entire area open at once. With Area 9, we plan to fill half of the area, close it, use the other half, then put a top cover on and close the entire area.

Q: Can you speak more about the disposal options being proposed after the landfill closes?
A: We manage 900,000 tons of trash annually. Before we run out of space at the landfill and close it , we must determine as a region what we are going to do about long-term disposal. We are actively working on planning for this. We have been working with our two advisory committees – the Municipal Solid Waste Advisory Committee (MSWAC), which includes elected officials, and the Solid Waste Advisory Committee (SWAC), which includes community members, commercial haulers, and other partners. We convened MSWAC and SWAC to determine options for waste disposal that we could propose to the Executive. In addition, Director Singer has worked with the mayors of our partner cities and her goal is make sure everyone's voice is heard.

There are three options being considered:

- Waste export by rail to a landfill in eastern Washington or Oregon
- Waste-to-energy (WTE) facility utilizing mass burn technology
- Hybrid option blending the waste export and waste-to-energy approaches. This option recently came out of discussions with our cities.

These three options have been proposed as part of the Comprehensive Solid Waste Management Plan, or Comp Plan, and were analyzed as part of this plan's Environmental Impact Statement , which is available for public comment right now through November 20. We extended our public comment period to 45 days to better learn what King County residents think. As part of this public

comment period, there will be five public events – four in person and one virtual – in various locations around the county. Ultimately, our partner cities and the Department of Ecology will have final say over adoption of the Comp Plan, which is expected to occur in 2030.

We know this has generational impact, so we've been working with mayors and councilmembers to ensure everyone has a voice in the recommendation we provide to the Executive. Washington State has studied our rail capacity, and we have concerns about whether we can maintain the capacity we would need for waste disposal in the long term. With the WTE option, it comes down to which technology we are using and where the facilities would be located. Would they be large or small? What do they take to maintain? That is why the third, hybrid, option was proposed, so we could still maintain our system if something were to happen that affected one of the disposal methods. You are all encouraged to visit our website and view the dates for public comment events; please join us and make your voice heard, and reach out to your elected officials.

Q: How will the public comment meetings be structured for the draft Supplemental Environmental Impact Statement for the Solid Waste Comprehensive Plan?
A: When you enter the meeting room, you will see an orientation board detailing the disposal options (waste export by rail, waste-to-energy utilizing mass burn technology, and a hybrid option which combines those two strategies). Subject-matter experts will be placed around the room to discuss different environmental concerns, such as air quality, water quality, soil, etc. There will be additional staff to dive deeper into each of the proposed disposal options.

Q: Do you find elk antler sheds at the landfill? What do you do with them?
A: Staff occasionally find these. According to our landfill rules, nothing can be removed from the landfill as this would be considered scavenging. Therefore, antler sheds stay on the property.