



Cedar Hills Regional Landfill Community Meeting Notes
Oct. 29, 2019
King County Library Service Center • 960 Newport Way NW, Issaquah

In Attendance

King County Solid Waste Division staff

- Scott Barden; Assistant Operations Manager
- Laura Belt; Supervising Engineer
- Bill Berni; Operations Manager
- Neil Fujii; Facility, Engineering, and Science Unit Manager
- Kathy Hashagen; Facilitator
- Annie Kolb-Nelson; Communications and Records Supervisor
- Matt Manguso; Communications Specialist
- Glynda Steiner; Deputy Division Director
- Dorian Waller; Government Relations Administrator
- Polly Young; Program Manager

Other King County Staff

- Darshon Dhillon, Public Health Seattle-King County

Bio Energy Washington (BEW) staff

- Kevin Singer, BEW Plant Manager

Department of Ecology Staff

- Tim O'Connor, Hydrogeologist

Interested parties

- Kim Brighton
- Rick Brighton
- Erin Childs
- Karen Dawson
- Janet Dobrowolski
- Claude Dykstra
- Peter Eberle
- Jacqueline Fontaine
- Jay Fontaine
- Gail Greenwood
- Edie Jorgensen
- Sean Kronberg
- David Morton
- Alan Noell
- Cathy O Shea
- David Prochazka
- Sue Sander
- Philipp Schmidt-Pathmann
- Nancy Shimeall
- Steve Spang

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Welcome

(Kathy Hashagen)

Kathy Hashagen began the meeting by welcoming those in attendance, explaining her role as facilitator, and reviewing the agenda. Hashagen explained that the structure of the evening's meeting would be slightly different than usual based on comments heard at the June meeting, which Deputy Division Director Glynda Steiner will explain.

Creating a Respectful Environment

(Glynda Steiner)

Steiner explained that at the June meeting attendees expressed ways the meetings could work better for them. Those issues will be addressed later in the meeting, but first Steiner needed to address the behavior at the June meeting, including the use of profanity, ethnic slurs, offensive remarks and personal attacks toward Solid Waste Division and King County employees. As a result of that behavior, some people left the meeting because they were uncomfortable. The Solid Waste Division wants the meeting environment to be respectful, so everyone feels comfortable, and we ask people to engage in a respectful manner. If disrespectful behavior occurs in the future, we will stop the meeting and take a break. If after the break that behavior continues, then the meeting will end. Steiner asked for everyone in attendance to agree to those terms, to which there appeared to be general consent. She then introduced Supervising Landfill Engineer Laura Belt.

Introductions, Meeting Format, Reporting Landfill Concerns

(Laura Belt)

Belt thanked those in attendance for coming before introducing Solid Waste Division (SWD) and other King County staff in attendance. Belt then explained the purpose and format of the meetings, as well as meeting elements:

- Division staff provide information about recent and planned activities at the landfill, and the BEW plant manager will do the same regarding its activities
- Meetings occur twice a year in the spring and the fall
- Notes will be provided on the division's website that summarize issues discussed at these meetings; the notes are not intended to be verbatim transcripts, but capture the general content of the meeting, including questions and answers

Belt also explained if neighbors need to report a landfill concern, they should call the Solid Waste Division at 206-477-4466. It is important to call this number because that is how the division logs and documents calls. That number, as well as contact information for BEW, is available at every meeting on the handout. Neighbors can also call Puget Sound Clean Air Agency's Hotline to report an odor, but SWD asks that you also call us so we can investigate the concern and record it in a timely manner. If the situation is an emergency, neighbors should call 911.

A neighbor interjected that the notes need to reflect more of the dialogue that occurs at these meetings. He gave the example that at the June meeting, neighbors expressed their preference for

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a court reporter to take meeting notes, but that discussion was not reflected in the notes. SWD employees apologized for that oversight. Steiner also mentioned that SWD will not be using the services of a court reporter at these meetings. Court reporters are only used when we're taking official public comment. The purpose of the notes is to summarize issues discussed at these meetings and capture the general content of the meeting, including questions and answers, for the benefit of those who were unable to attend. Meeting participants are welcome to take their own notes.

Construction and Environmental Monitoring Activities

(Laura Belt)

Construction Updates on Area 7 and Area 8

In July, the division began placing waste in Area 8, the newest disposal cell. We have completed a transition period between filling in Area 7 and Area 8. The division is placing a temporary winter cover on top of Area 7, and then in summer 2020, will work to create a liner connection between Area 7 and Area 8 before putting a final cover on Area 7.

Groundwater Quality

Groundwater quality remains the same since the June meeting, with no changes or trends seen. There has been one quarterly report since the last meeting, and we are in the process of reviewing the results for the next quarterly report.

All reports related to groundwater monitoring, including quarterly and annual reports, are available on the division's website <https://kingcounty.gov/depts/dnrp/solid-waste/facilities/documents.aspx#monitoring>.

Perched Zone

As has been mentioned since 2015, there is a small, shallow perched zone on the east side of the landfill that is in a tight, silty formation with minimal flow. The area has had some impacts from past landfilling activities.

The division is currently in a year-long monitoring period of the perched zone. Next summer the division will finish that monitoring at which point our consultant will review the results, write a report and send it to the Washington Department of Ecology for review.

Western Buffer Vegetation Enhancements

The division has received several comments from neighbors on the west side of the landfill about getting more conifers in the buffer to provide better screening for landfill neighbors. About three years ago, the division enlisted the assistance of the County's Forester. More recently we consulted with another expert, a Landscape Architect, who does large-scale forestry. Both experts said that in order to re-forest the area, we would have to clear-cut large areas so new

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conifers could grow. The division does not think that clear cutting large areas along the property line would be a good solution to the issue and could potentially cause a larger problem. We are working with the Landscape Architect on other possible solutions that would not require clear cutting large swaths of existing deciduous trees. There is no concrete plan yet, but when we have one, we will be reaching out to neighbors who would be immediately impacted to share and discuss the proposal with them.

Testing Various Types of Daily Cover

The division recently tested different types of daily cover to see which performed better at controlling odor. One test involved putting soil down as the top surface in Area 7 and compared that to a daily cover that was oversized compost, essentially chunks of wood. We found that both performed similarly. Then we did a test comparing the tarps we currently use to a spray-on clay product and then a hog-fuel product that is mostly ground up wood. Those also performed very similarly to one another. The team conducting this work is recommending we continue our current practice of using a tarp on the top of the active area and soil on the side slopes. Once the area reaches its full height, we would cover the tops and side slopes with soil.

Operational Activities

(Scott Barden)

Recap of October 26 Landfill Tour

About 40 people attended the October 26 landfill tour, including a Boy Scout troop. The event was well-attended, and a lot of good questions were asked, including how landfill gas is collected and sent to BEW for processing.

Operational Activities

Operations has mainly been focused on Area 7 interim closure, which includes laying down liners and gas collection pipes. September was one of the wettest on record and that caused some delays in getting the liner down. We're close to finishing that work and just need a few more days of good weather to complete it.

Landfill Fire Update

On Aug. 17 there was a fire onsite at the landfill. A couple employees were on site around 7:15 p.m. and noticed smoke coming from Area 8. The division wasn't disposing garbage in Area 8 that day. The employees called 911, notified their leads and then the phone tree went into effect to notify other employees. Eastside Fire and Rescue arrived at about 7:25 p.m. and asked about landfill gas. Our onsite landfill gas technician told the fire department Area 8 was not collecting gas yet. One of our heavy equipment operators used an excavator to move garbage so the fire department could douse the area with water. The fire was extinguished by 8:30 p.m.

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We notified King County-Seattle Public Health and asked for next steps. They responded on Aug. 19 and they observed there was about 10-12 feet of garbage on the bottom of Area 8 and the fire did not penetrate very deeply, less than two feet. We removed the waste from the area so Public Health could review the area, and they found about five areas where the drain layer material (rock) was blackened. Public Health asked us to dig those areas up by hand so they could look at it more closely. The drain material is about 24-inches deep and the soot only penetrated about 4 inches. Public Health and Eastside Fire and Rescue both declared the site did not warrant further investigation, so we were able to resume putting waste in that area.

Bird Management Plan

At the June meeting neighbors asked the division to speak with the Seattle Audubon Society to solicit ideas to address the eagle situation at the landfill. We spoke with their Community Engagement Manager Wendi Walker and she said, “eagles, like any wild animal, will be drawn in if they have access to food. Controlling that access rather than any efforts to control the birds seems like a more successful long-term strategy. I realize that isn’t a simple proposition or it would have already been done. It does, however, reflect a need to shift how we as a community think about our choices to manage our waste.” Wendi also stated that “wildlife management is and should be conducted under the applicable local and federal guidelines,” and recommended we speak with Justin Dayton (a wildlife biologist whose company, Innovative Wildlife Solutions, is under contract by the division to assist with bird management).

We also contacted Ed Deal, the President of the Board at the Urban Raptor Conservancy who said, “Bald Eagles as a nuisance wildlife species is a new phenomenon in Washington. Your situation is likely the first one in Washington. As you already know, eagles are highly protected at the federal and state levels. You are doing well to work with the U.S. Department of Agriculture (USDA) on permitting for harassment. I personally have no experience in this issue. I would suggest contacting the U.S. Fish and Wildlife Service office in Fairbanks, Alaska and/or Alaska Game and Fish. Eagles are far more numerous up there, so I suspect they have dealt with similar situations in the past. They may be better equipped to advise you on appropriate permitted harassment techniques.” We did reach out to Alaska Fish and Game and they said they are having similar problems with eagles and to let them know if we come up with any solutions.

Cedar Hills has had a wildlife plan in place since 2002, but the bird permit was always held by the USDA. In 2019 we applied and were awarded our own bird permit, which means we can have a private agency come and help us control the birds. Innovative Wildlife Solutions is helping us with wildlife deterrents, including minimizing the size of the active area, increasing the frequency of mowing to prevent suitable nesting areas, and overall just making the landfill a less attractive place for the birds. We were able to remove a flock of starlings that were nesting in the retaining wall between the landfill’s administrative trailers and BEW by using cut up pool

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noodles to plug the holes where the birds were nesting. We'll also be conducting a wildlife survey by breaking the landfill down into five zones, taking photos of the areas and doing bird counts to keep track of where they are. Other harassment techniques can include using pyrotechnics, trapping, and legal take to trap, relocate and possibly euthanize. In 2020 the division will apply for an eagle depredation permit that will allow us to trap, relocate and haze the eagles.

Follow-up from June Meeting

(Glynda Steiner)

Protocols on Notifying Neighbors During an Emergency

If there is an emergency event at the landfill, the Solid Waste Division would reach out to the Office of Emergency Management that uses its mass notification system to notify neighbors of the event. Depending on the event, we and the Office of Emergency Management would coordinate with first responders. It's important for neighbors to sign up for ALERT King County, www.kingcounty.gov/alertkingcounty; to receive a variety of notifications from the county.

The division also has systems in place that help notify us of emergencies or issues at the landfill including a SCADA system (supervisory control and data acquisition) system on the wastewater and gas collection systems. If there is an anomaly, an alarm goes off and shuts the system down and notifies us of the issue. We also recently replaced all five blowers at the North Flare Station. We do not need all five blowers to operate the landfill, only three are needed at one time, and the other two are used as backups. The division also hosted an emergency management meeting to conduct a drill of a landfill fire and invited all the emergency responders – fire department, police department, medics – and briefed them on our procedures to get them familiar with our facility and protocols.

2020 Site Development Plan Update

The division is currently in the process of writing a Draft Environmental Impact Statement (EIS) for the 2020 Cedar Hills Site Development Plan. We took public comment earlier this past summer during a Scoping period to get input from the public on what they wanted to see addressed in the EIS. The Draft EIS will be released next year for public review.

There were questions raised during scoping about why one of the options in the Site Development Plan would be to move landfill support facilities to the East side of the landfill. After consideration of the comments received, the division decided to remove that option from consideration. We are still considering moving support facilities to the south and north, as well as adding an offsite location option.

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Lack of Trust in the Solid Waste Division

The division has heard there is a lack of trust in us and our operations, and a request was made to have a court reporter at these meetings to record what was said verbatim. The Solid Waste Division does not provide court reporters at these community meetings. Court reporters are only used when we're taking official public comment. The purpose of the notes is to summarize issues discussed at these meetings and capture the general content of the meeting, including questions and answers, for the benefit of those who were unable to attend. Meeting participants are welcome to take their own notes.

Neighbor Survey

(Annie Kolb-Nelson)

Based on feedback we've received about the quality of these meetings, what works, what doesn't, and how they can be improved for everyone, the Solid Waste Division has contracted with a firm that specializes in quantitative research. There are paper copies of an initial survey at the back room we would ask you to fill out tonight. Your responses will be used to inform the larger survey that will be sent to the community in December, which will be an online survey coded to the recipient. We would love to hear your feedback on if and how the landfill is affecting you, how we can improve customer service and operations, and how we can keep you informed on landfill activities.

Solid Waste Advisory Committee (SWAC) Recruitment

(Dorian Waller)

The division's Solid Waste Advisory Committee (SWAC) is still recruiting for a landfill neighbor to join the committee. SWAC meetings are held every third Friday at King Street Center in downtown Seattle from 9:30-11:30 a.m. Members serve two, three-year terms.

More information about SWAC can be found on the division's website at <https://kingcounty.gov/depts/dnrp/solid-waste/about/advisory-committees/swac.aspx> or by reaching out to Dorian Waller at 206-263-1368 or dwaller@kingcounty.gov.

Question and Answer

The following is a summary intended to capture the general content of the questions asked and the answers provided; not a verbatim transcript.

At the beginning of the meeting a comment was made that the meeting notes from the June meeting lacked a conversation where neighbors expressed that the notes are insufficient and do not include everything that is discussed or said at the meetings.

- Not including that conversation in the June meeting notes was an oversight by the division. The notes are not intended to be a verbatim transcript of the meeting but summarize issues discussed at these meetings and capture the general content of the meeting, including questions and answers, for the benefit of those who were unable to attend.

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How does the new option of moving facilities offsite fit within the 2020 Site Development Plan Scoping Meeting?

- We will get back to you on that. We're in the process of evaluating what we need to do to address that and take the appropriate actions.

The original special use permit in 1960 stated a 1,000-foot buffer would be kept in a "natural state" for the protection of the properties. Why do you want to change it to 500 feet? How is that protecting the surrounding communities? Why do you want to change the buffer from what the original permit said?

- The request we're making is a buffer modification to accommodate facilities, not to bury garbage within the 1,000 feet.

Why can't you use a special use permit for just those specific facilities rather than for the entire buffer?

- That is a permitting question and something we may get back from the King County Permitting Division because they're the experts in land use.
- Steiner stated the division would look at this request.

Are you planning on building new area heights higher?

- Yes. That would require us to get a permit from the Department of Health because the areas not covered by the settlement agreement are limited to 800 feet, not 788 feet. If we wanted to pursue anything beyond 800 feet, we would have to get a modification of the permit.

Will the scoping comments be in the Draft EIS?

- Those comments will most likely be released as an appendix of the Draft EIS, but we do not respond to those specific comments. They are only in the Draft EIS because of the State Environmental Policy Act (SEPA) process, but there is no response to those comments.
- The scoping comments are what the public provides to us, telling us what they think we should be studying in the EIS. Those comments are given to our consultant who develops a draft EIS, which we then review before releasing the Draft EIS.
- When the Draft EIS gets issued there will be a public comment period and a public hearing. Those are all recorded and get included in the Final EIS which is reviewed by SEPA officials who render the final decision of what we'll do.
- We will notify you of upcoming public hearings and comment periods in the same way we inform you about these meetings and other past public comment periods.

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How often are tours held and how can I attend one?

- We frequently provide tours. Call 206-477-4466 and speak with Brenda Loder who can help you schedule a tour.

Has there been an investigation into what started the fire?

- We don't know exactly what caused the fire. We were not disposing garbage in that area on that day, we were disposing in Area 7. The fire department declared it an accident and indicated it did not warrant investigation, so we didn't pursue it any further.

Why was Herrera not informed of the height limitations of Area 5, 6 and 7? Was it ignorance or were you hoping nobody would notice?

- Laura Belt stated that Herrera did know about the height limitations, but when we were looking at what it would take to make the landfill until 2040, which is what we wanted to know, we suspended a lot of the limitations so we could really see what it would take to get to 2040. We wanted to see how many options were available and what mountains we would need to move to get there. All Herrera was doing was answering the question, "what would we have to do to expand the landfill out to 2040." It was a different question than what we normally ask; we needed to do more exploration and ask the "what if" questions. I am aware of the lawsuit, and in the 2010 Site Development Plan that we had referred to a limit, but not to the exact height. Before making any decisions or moving ahead with any work, we do the necessary review and vetting to make sure we are in compliance.
- Glynda Steiner stated that when she found out there was a settlement agreement that constrained us to 788 feet, we sent the consultants back to redo everything. She stated she was unaware because she was new to the division, but we were not waiting for the public to remind us of our obligation.

How much would the average household garbage bill increase each month if we sent waste out via rail?

- We don't have that answer right now, but there are currently studies underway that look at the costs associated with exporting waste via rail or building a waste-to-energy facility.

Is it too late to divert recyclable material from the landfill before it is buried?

- Once recyclable materials have been put in the truck with other types of garbage it is contaminated and can no longer be recycled. But the Solid Waste Division has several work groups and programs that do outreach and public education to schools, communities, cities and others to help increase the amount that we recycle. We recycle around 52 percent, but about 60-70 percent of what is sent to the landfill could have been recycled. Some of that

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could be helped by policies that would encourage recycling, like the ban on construction and demolition debris we enacted this year. The new transfer stations we build are designed to provide more and better recycling services, and to remove these materials from the waste stream.

Are there any plans to put facilities in the buffer, and has that changed since the scoping meeting? I'm concerned you'll eventually put garbage in the newly-created space; there is nothing that stops the division from putting garbage in a newly formed (500-foot) buffer.

- Two of the proposals for relocating facilities are for putting them within the 1,000-foot buffer. There are two options we have. We can apply for modification of the special use permit so we would effectively be reducing the buffer from 1,000 feet to 500 feet. That concept does not propose we would put garbage within that 500 feet. It's solely for moving our facilities out of the space where a new landfill cell, Area 9, would be located. The other option that was suggested tonight was to get a special permit for the facility rather than for the entire buffer. Those are two different approaches that we will be discussing with the King County Permitting Division.

Is the No-Action Alternative the only one where buildings aren't placed in the buffer?

- We are now exploring an off-site location for the support facilities that would not require a permit modification or placement of facilities in the buffer.
- Each of the three site development alternatives under consideration (except the no action alternative), include three possible facility relocation options, so there are nine possible action alternatives to evaluate.

You operate and maintain the landfill, but don't address my health mitigation suggestions.

Why have these concerns not been fully identified and mitigated, and when can that be done?

- A lot of those concerns will be addressed in the EIS. We have several permits, including air, discharge, etc., and we comply with those. When we don't comply, we get violations and take the appropriate actions to correct the situation. None of our regulatory agencies are requiring we take additional actions. Glynda said she would sit down with Sue to talk about this.

What kind of facilities would you move to the north side of the landfill?

- They would be our administrative buildings, maintenance shop, truck wash and possibly the scale house. The truck wash would be rebuilt to current standards.

Are the flares tested every five years?

- Yes.

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Ms. Brighton smelled the candlestick flare on the north side in April and in June during the tours. What is being done about?

- After you let us know about the smell at that flare, we looked into it and discovered there was a leaky joint, which we tightened and fixed. What you're smelling recently might not be the candlestick flare because it was fixed. We will take another look at it and get back to you.

What is being done about the odors coming from the leachate ponds?

- Laura and Scott will get back to Kim on this.

What happens when the division discovers the greenhouse gas emission model is wrong? If it is discovered that the regulations/models you've been following are flawed, what do you do? If we're following the regulatory requirements correctly, and someone becomes wiser than they are now and they change, what would the division do?

- We use the model that we are directed to use by the U.S. Environmental Protection Agency. We apply those models exactly how we are supposed to in accordance with federal regulations. We submit them to the Washington Department of Ecology and the EPA for review and they are accepted every year. If the models change it will be because the EPA has identified a different way to model fugitive gases from landfills. We aren't involved with EPA's decision on how to model. We just follow their regulations on calculating gas emissions. If the regulation changes, our results will change.

Why do you drive the perimeter road twice a day?

- We do an odor check in the morning, and then our utility work group drives the road to look for downed trees.

Bio Energy Washington (BEW) Plant Update

(Kevin Singer)

About BEW

Singer explained that BEW is a renewable gas production facility that converts landfill gas from the Cedar Hills Regional Landfill into pipeline quality gas through a series of processing equipment. The site produces enough renewable gas to supply approximately 30,000 homes each year. The site was established in 2008 and partners with the King County Solid Waste Division and Puget Sound Energy to receive, process and supply gas to consumers.

The site supplies 65 percent of its own electricity through onsite power generation. About 80 percent of the methane delivered to BEW from the landfill is recovered at the site. Of that amount, 70 percent is sent to the pipeline and 10 percent is used for power generation.

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BEW is committed to three core values – health and safety, environmental excellence, and continuous improvement.

Plant Operations

- Staffing is 24 hours, 7 days week, 52 weeks per year. Each gas plant technician undergoes a qualification process of at least 90-days before working without supervision. Minimum of two qualified plant technicians are onsite at all times.
- We recently qualified four new plant technicians and are hiring one more.
- At the June meeting, there were questions about emergency response coordination at BEW:
 - Our facility utilizes a SCADA system (Supervisory Control and Data Acquisition) to monitor and alarm for any emergency or abnormal conditions.
 - The plant's fire suppression system is remotely monitored by Johnson Controls who will contact emergency services in the event of a fire or loss of communications to the facility.
 - A full Hazard and Operability (HazOp) Study was performed to analyze each part of the facility to determine deviations, consequences and subsequent safeguards to minimize these consequences. This study is reviewed periodically and during major changes to re-evaluate risks and improve safeguards.
- BEW maintains a hotline neighbors can call for any concerns is 425-392-3918

Health and Safety

- No injuries recorded at the plant in the past six months, and there have been no significant injuries reported in the past 32 months
- No environmental permit exceedances in the past six months
- Annual emissions testing is currently underway to meet Puget Sound Clean Air Agency permit requirements, and a qualified third part company is performing the testing

Environmental Compliance

- New catalysts being tested on the power generation system for increased catalyst life to reduce engine exhaust emissions (NOx). The new technology is showing sustained improvement over the baseline performance by about 20 percent. We purchased an additional set and installed it, and plan for a third and final set in early 2020.
- Recognize that the Solid Waste Division has environmental requirements that it must adhere to when collecting and delivering gas to BEW. Fully supportive of the mission to minimize greenhouse gas emissions to the environment and maximizing renewable gas for beneficial use.

Continuous Improvement

- Uptime for the plant in 2019 is 93 percent. The downtime was because of the cold weather event in February that led to equipment damage and power outages.

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- BEW and the Solid Waste Division have continued daily coordination to help improve communications and share best practices routinely.
- The new sulfur removal media is outperforming the old media considerably. In single-bed operations, 100 percent of sulfur is removed by this media compared to 60 percent removed by the old media. Typical operations include two-beds in series so the second bed is now acting as a guard bed instead of actively removing sulfur. The plan is to continue using this media going forward.

Upcoming Projects

- No significant modifications or changes planned that will adversely affect noise, odor, or the community. Most of our work involves inspections, routine maintenance, and changing media that scrubs the landfill gas.
- We're making preparations for the upcoming winter weather, including freeze protection and cold weather preparedness activities.

BEW Question and Answer

The following is a summary intended to capture the general content of the questions asked and the answers provided; not a verbatim transcript.

How is BEW connected to the candlestick flare? How does it kick-back, or why does it separate? If it's low methane, what else is in it?

- (This question was answered by Laura Belt): It's a very low methane gas flare used to control gas migration in areas where we're pulling methane out that is too low quality to go to the big flare. Some of the methane is coming along the west side of the landfill, outside of the lined area, and some is coming from the east side and some from the older landfilled areas.
- There's just enough methane, about 10-18 percent, for it to combust. The other 80 percent is a mixture of oxygen, carbon dioxide and other gases. Laura will find out more information about the candlestick flare and the chemicals.

There's been a lot of noise from the plant at night that's a sound similar to a blast furnace.

- I can go back and look at our noise monitors and records to try and identify that. Our noise monitoring machine was stolen, so we were using hand-held equipment.

There have been slight vibrations at our house (west side of landfill). Does BEW test for acoustical vibrations?

- Yes.