From: Mason Leavitt
To: Coffin Butte Landfill Appeals
Subject: Public Comment LU 24-027
Date: Tuesday, January 27, 2026 2:21:50 PM
Attachments: Beyond Toxics Comments LU24-027 January 27th 2026.pdf

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Hi Benton County Staff,

Please find the attached pdf file with Beyond Toxics comments on LU24-027. You can use my name and email (mleavitt@beyondtoxics.org) for any data entry that requires this information. The address of our comments can be found in the pdf.

Please confirm the receipt of this email, and let me know if I can provide any further information.

Thank you,
Mason Leavitt

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Mason Leavitt
GIS Analyst and Programs Coordinator
Beyond Toxics
mleavitt@beyondtoxics.org
(541) 645-5972

Public Comment on LU-24-027
Beyond Toxics
120 Shelton McMurphy Blvd. Suite 280
Eugene, OR, 97401

To support their expansion application, Coffin Butte Landfill conducted an odor study using two emissions modeling softwares. The outputs of these models suggested that the landfill with its expansion would only pose odor nuisances on the landfill property itself. Each year, DEQ receives dozens of complaints from nearby residents whose daily lives are impacted by the odor of landfill gas. The results of Coffin Butte Landfill's odor study contradicts the lived experiences of residents, and it has been a lynchpin in their argument that the expansion will not "seriously interfere" with adjacent land uses.[1] However, Coffin Butte is already seriously interfering with adjacent land uses, and expanding the landfill will increase this problem. DEQ's PEN shows that Republic Service's main exhibit to demonstrate odor compliance with Benton county code is in fact based on bad data.

DEQ recently issued a pre-enforcement notice (PEN), which is a legal document outlining violations[2] of regulatory law that Coffin Butte could be fined for. Many of these violations found by DEQ call the odor study into serious question. Coffin Buttes odor study is based on two EPA models that calculate the total amount of gas produced by the landfill and estimate where those gasses travel and cause odors. LANDGEM, calculates the likely amount of gasses a landfill produces based on the waste in the landfill. This can be combined with the Gas Collection and Control System (GCCS), which is supposed to collect landfill gas and route it to a flare and/or energy generator for destruction. The GCCS doesn't capture all the gas, and the remaining gas is called fugitive emissions.

Coffin Butte took its estimated fugitive emissions from this and entered it into the second model, called AERMOD. This model estimates how those fugitive emissions will move off of the landfill. Coffin Butte estimated the movement of a few gasses that are likely to cause odors in their study using AERMOD. They found that the landfill with its expansion would not cause

[1] Benton County Code 53.215.
[2] One could use the word "infractions" as well. Many of Republic Services communications have emphasized that they have not "violated" the law since DEQ has not officially fined them yet. We use the word violation since Coffin Butte's actions are not in compliance with regulatory law, which is generally understood as a violation of law.

nuisance odors despite the fact that the landfill currently causes nuisance odors without its expansion.

There are numerous flaws to call attention to in this study. These flaws help bridge the gap between what residents are experiencing and the ill-founded conclusion that the landfill is not causing/ will not cause an odor problem. These flaws also suggest the operators of Coffin Butte either do not know how to comply with federal and state regulations, or they are choosing to violate them. Republic Services, the corporate owner of Coffin Butte, is the second largest waste management corporation in the United States. They are a fortune 500 company, and they operate more than 200 landfills across the nation. A company with this level of wealth, resources, and size has little excuse to not be complying with regulatory law. The PEN thoroughly undermines the integrity and trustworthiness of the applicant's odor study as explained below. Republic Services does not know or chooses not to comply with the law for air quality emissions. As a result, they have (un)knowingly used incorrect inputs to their odor model, which has resulted in the incorrect finding that odor will not seriously interfere with adjacent land uses.

1. DEQ has found that Coffin Butte Landfill is not complying with federal and state requirements for its Gas Collection and Control System (GCCS), and they found the monitoring to ensure efficacy of the GCCS to be inadequate.
    a. Coffin Butte's GCCS is not properly designed for a landfill of its size. The system is too small to handle the amount of gas produced by the garbage it contains.[3]
    b. Coffin Butte's GCCS has been shut off for extended periods of time. For example, the GCCS was not operating for 17 total hours in the first quarter of 2025. GCCS should be operational 24 hours a day.[4]
    c. Coffin Butte's flare has also been shut off for extended periods totaling 15 calendar days in early 2025. One such shutdown lasted 4 days. While the GCCS

[3] Page 5. Pre-Enforcement Notice for Valley Landfills Inc. Department of Environmental Quality Western Regional Office. https://www.oregon.gov/deq/Programs/Documents/CoffinButteTV-01PEN.pdf
[4] Page 6. Pre-Enforcement Notice for Valley Landfills Inc. Department of Environmental Quality Western Regional Office. https://www.oregon.gov/deq/Programs/Documents/CoffinButteTV-01PEN.pdf

was still collecting gas, that gas was vented straight into the atmosphere without treatment.[5]

d. Coffin Butte is not monitoring an average of 72% of their landfill for leaks. Coffin Butte cited these areas as "exempt" from monitoring despite the law requiring them to get DEQ approval for exemptions. DEQ has never approved an exemption for Coffin Butte.[6]

e. Independent EPA and DEQ inspectors and community members have repeatedly found and documented holes in the landfill liner, which is supposed to stop gas from escaping the landfill. Coffin Butte maintains they inspect the liner daily for holes, but other parties have found bushes and small trees growing out of the liner, which suggests holes go unaddressed for extended periods of time allowing vegetation to grow out of them.[7]

2. DEQ found that Coffin Butte's LANDGEM calculations are wrong and are under estimating the total landfill gas produced by the facility.

   a. Coffin Butte landfill inappropriately excluded large amounts of waste from the LANDGEM model.[8] This exclusion reduces the total amount of landfill gas estimated to be produced by the landfill and therefore underestimates production of odorous pollutants. While exclusions are sometimes allowed, federal regulations require landfill operators to seek an official exemption from regulatory agencies. Coffin Butte has not sought an exemption from DEQ. In email correspondence, DEQ acknowledged this flaw and is requiring Coffin Butte to include that waste in new LANDGEM calculations.

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[5] Page 6. Pre-Enforcement Notice for Valley Landfills Inc. Department of Environmental Quality Western Regional Office. https://www.oregon.gov/deq/Programs/Documents/CoffinButteTV-01PEN.pdf

[6] Page 3. Pre-Enforcement Notice for Valley Landfills Inc. Department of Environmental Quality Western Regional Office. https://www.oregon.gov/deq/Programs/Documents/CoffinButteTV-01PEN.pdf
Also see https://www.beyondtoxics.org/wp-content/uploads/Oregons-Secret-Climate-Killers.pdf (Submitted to the record in October).

[7] Page 7. Pre-Enforcement Notice for Valley Landfills Inc. Department of Environmental Quality Western Regional Office. https://www.oregon.gov/deq/Programs/Documents/CoffinButteTV-01PEN.pdf

[8] Email correspondence between Nancy Whitcombe and Dylan Darling, DEQ Public Affairs Specialist for Western Regional Office. January 16th, 2025. Dylan states "The prior LandGEM runs did not include total waste, with non-degradable waste excluded from the model. DEQ is requiring total waste for inclusion in the LandGEM runs for the updated permit that will go out on public notice. The data has not yet been finalized and reviewed, so is not available for sharing at this time."

3. There are flaws with the odor modeling tool worth considering. Modeling is not based on actual measurements of pollutants. It estimates the quantity of those pollutants and it estimates where they travel. AERMOD has several limitations worth noting.
    a. AERMOD is not good at calculating the movement of air pollutants in low wind speed environments.[9] Most complaints filed by residents occurred in conditions of 4 mph or less (97%), with a majority listing a wind speed of 0s mph (57%)[10]
    b. AERMOD is not good at modeling across complex terrain.[11] Coffin Butte landfill is placed between two large hills on the edge of a valley. AERMOD relies on wind measurements taken at a higher elevation than these hills. AERMOD is not able to properly account for this complex terrain.
    c. AERMOD is not able to model emissions in an thermal inversion,[12] which is a very common weather pattern in the Willamette Valley during the cold months. 82% of complaints occur during the fall, winter, and spring, the seasons where inversions are common in the Willamette Valley.[13]

About

Beyond Toxics is an environmental justice organization based in Eugene Oregon that focuses on delivering equitable access to clear air, water, and food for all Oregonians. Beyond Toxics has 27 years of experience in navigating regulatory policy, conducting legislative work, and ensuring the most impacted voices of industrial operations are heard in land use decision making processes. Mason Leavitt, the principal author of these comments is a GIS analyst with 8 years of experience in spatial data analysis with 3 of those years focusing on landfill gas management.

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[9] Applicant Exhibit, item A0073. See page 25 under section 5.3 https://www.bentoncountyor.gov/wp-content/uploads/LU-24-027/PlanningCommission/Applicant%20exhibits/A0073_061625_E36_Resubmit-Revised2025OdorStudy_SUBMISSION.pdf

[10] Applicant Exhibit, item A0073. See pages 27-33 under section appendix A. https://www.bentoncountyor.gov/wp-content/uploads/LU-24-027/PlanningCommission/Applicant%20exhibits/A0073_061625_E36_Resubmit-Revised2025OdorStudy_SUBMISSION.pdf

[11] Applicant Exhibit, item A0073. See page 25 under section 5.3 https://www.bentoncountyor.gov/wp-content/uploads/LU-24-027/PlanningCommission/Applicant%20exhibits/A0073_061625_E36_Resubmit-Revised2025OdorStudy_SUBMISSION.pdf

[12] Applicant Exhibit, item A0073. See page 25 under section 5.3 https://www.bentoncountyor.gov/wp-content/uploads/LU-24-027/PlanningCommission/Applicant%20exhibits/A0073_061625_E36_Resubmit-Revised2025OdorStudy_SUBMISSION.pdf

[13] Rupp, D. E., Shafer, S. L., Daly, C., Jones, J. A., & Frey, S. J. K. (2020). Temperature Gradients and Inversions in a Forested Cascade Range Basin: Synoptic- to Local-Scale Controls. *Journal of Geophysical Research: Atmospheres*, *125*(23), e2020JD032686. https://doi.org/10.1029/2020JD032686