

Memorandum

DATE: April 18, 2025

TO: Jeff Shepherd, P.E. – Civil & Environmental Consultants, Inc.

Adam C. Jenkins, PE, INCE Bd. Cert., CTS-D

FROM: Justin Morgan, INCE

RE: Republic Services Coffin Butte Landfill – Ambient Noise Analysis Summary

This memorandum is provided in response to recent comments received from Benton County concerning the use of a median value for multiple hourly sound levels instead of the lowest measured hourly sound level to assess increases to existing ambient noise conditions. As discussed below, the use of median ambient sound levels in the Republic Services Coffin Butte Noise Study (Noise Study) surpasses the requirements of the Oregon Administrative Rules (OAR) and are more stringent than what is established under Oregon Administrative Rules (OAR) Chapter 340-035.

- 1. OAR 340-035-0035(3)(a) requires that sound level measurements follow the procedures defined in the Sound Measurement Procedures Manual (NPCS-1). Section 4.5.6 of NPCS-1 discusses measurements to determine ambient sound levels and states :
 - "... it is important that data is obtained in time periods of interest during the day and also both the week and weekend to obtain data which are representative. It is also important to note that the data must be taken without emphasis on either noise peaks or unusual quiet."
 - Use of the median hourly ambient sound level in the Noise Study is consistent with this requirement because it excludes the loudest and quietest sound levels and produces a representative sound level for the area. Using the lowest hourly sound level would be inappropriate, as would the use of the highest hourly sound level.
- 2. Section 4.5.6 of NPCS-1, summarized above, states data should be obtained in "time periods of interest", which would the operating hours of the Coffin Butte facility. Median ambient sound level values reported in the Noise Study were calculated using data collected during all times of the day, not just the operating hours of the landfill. This approach included quieter sound levels during periods when the landfill would not be operating to present a conservative analysis. If only the data collected during the operating hours were used, the median ambient sound levels would increase up to 2 dB during the day and 9 dB at night, which would result in higher thresholds than what was used in the Noise Study. Therefore, median ambient sound levels used in the Noise Study result in a more conservative assessment than those that would be otherwise be established by the OAR.
- The OAR requirement to limit increases to ambient sound levels to no more than 10 dB only applies to new industrial or commercial noise sources located on previously unused sites. OAR 340-035-0015(47) defines previously unused industrial and commercial sites as properties that have not been used by any

industrial or commercial noise source during the 20 years prior to construction of a new industrial or commercial noise source on that property. The site (including the expansion area) has been used for industrial and commercial activities within the last 20 years and therefore does not meet the definition of a previously unused industrial or commercial site. Therefore, the OAR requirement to limit increases to ambient sound levels is not applicable to the site and by assessing the increase to ambient sound levels the Noise Study surpasses OAR requirements and reduces potential noise effects within the community beyond what would otherwise be required by the OAR.

Based on this information, the use of median ambient sound levels in the Noise Study is consistent with the requirements of OAR 340-035. Furthermore, how median ambient sound levels were calculated and the analysis of increases to existing ambient noise levels in general, surpass the requirements of the OAR, resulting in a more stringent assessment of noise effects in the community.

Sincerely,

Adam C. Jenkins, PE, INCE Bd. Cert., CTS-D

Vice President - Acoustical

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