

# MEMO

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**Date:** August 13, 2021  
**To:** Creed Eckert, Planner  
City of Tangent, Oregon  
**From:** Kerrie Standlee, P.E.  
**Re:** L&M 6-Month Noise Compliance Testing Report  
DSA File #: 101201

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## Message:

At your request, I reviewed the August 4, 2021, ABD Engineering & Design report entitled, *L&M Fabrication – Noise Compliance Testing – 6 Month*. The report was submitted to the City of Tangent, Oregon in response to the company's Conditional Use Permit requirement that noise compliance testing be conducted 6-months after proposed noise controls at the company's facility had been installed. This memo provides my observations and conclusions about the report.

First, I found the material in ABD's August 4 report to be very understandable. The only piece of information not specifically stated in the report which might have a bearing on the final conclusions I reach, concerns the loading and material handling operations that occur in the North Yard. At the top of page 5 of the report it is stated that the site was fully operational but, no where in the report does it talk about activities occurring in the North Yard. The Appendix to the report (provided by L&M Fabrication) provides a good listing of operations occurring inside the buildings, but it does not provide any comment about activities outside the buildings or in the North Yard. I am interpreting the data in the report as including noise coming from the North Yard because of the one statement at the top of report concerning the full operations at the site, but L&M should be asked to confirm that all operations were occurring in the North Yard during the measurement period.

Regarding the hourly statistical noise level data presented in the report (the L<sub>01</sub>, L<sub>10</sub> and L<sub>50</sub> noise level data), I agree with the report's author that the data supports the conclusion the noise radiating from the L&M site complies with the limits specified in the DEQ noise control regulations for industry and commerce. There is only one instance in the data where the reported noise level (the hourly L<sub>01</sub> noise level of 76 dBA during the 20:00 hour at



## L&M 6-Month Noise Compliance Testing Report

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location M2) is above the DEQ limit (75 dBA) but, when the contribution of ambient noise is considered, it is clear the noise level without ambient contributions is likely below the limit. Thus, my conclusion that the hourly statistical noise level data supports the conclusion that noise radiating from L&M Fabrication operations was in compliance with the DEQ statistical noise level limits.

Regarding the impulsive noise compliance issue, it is much more difficult to draw a conclusion from the data. The author presented a discussion about the fact that there are many sources of impulsive noise unassociated with L&M operations that exceed the DEQ noise limits. The author included examples of the levels caused by some of those sources as noted during on-site observation periods. The author then moved to present impulsive noise level data for sources known to be associated with the L&M operations based on observations also made at various times during the measurement period. While I find the data presented in Table 4 of the report (*Measured impulse noise levels from the L&M site*) helpful in drawing a conclusion, it would have been more helpful if the report had presented a table showing the maximum impulsive noise level found during each measurement hour like that presented for the hourly statistical noise level data. And it would have been more helpful if the source data in Table 4 had included information about where the source was located when the reported level was observed.

Because I have had the opportunity to observe and measure the noise at the same locations monitored for the 6-month report, I agree that many sources other than those at the L&M site cause impulsive noises that exceed the DEQ noise limits. And, I find the results of the analysis of the data presented in the report to reasonably support the conclusion that the impulsive noise radiating from the L&M operations was in compliance with the DEQ noise regulations during the measurement period.

Finally, I conclude the data presented in L&M's 6-month noise compliance testing report shows noise radiating from operations at the facility on July 6/7 was in compliance with all applicable DEQ noise limits.

