# **Jackson Valley Quarry Noise Presentation**

# **Amador County Technical Advisory Commission**

## November 2, 2023





Ultimate Mine Disturbance Area

Site Boundary



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Figure A



The 17 Nearest Noise-Sensitive Receptors were Identified and Analyzed in the Noise Study



Jackson Valley Quarry Amador County, CA Nearest Noise Sensitive Receptors Figure B





Processing Equipment Noise Measurement Locations

Ambient Noise Measurement Locations



Jackson Valley Quarry Amador County, CA Noise & Vibration Measurement Locations

Figure C

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Noise mitigation measures developed for 24-hour operations will be implemented at all crushers and screen decks despite not being required. Jackson Valley Quarry Amador County, CA

Crusher Noise Curtain

Figure F

## Effects of Weather on Sound Propagation

- Standard Day" atmospheric conditions (59 degrees F & 70% relative humidity), were used to model sound propagation from the project site to the residents, per industry standard convention.
- Average daytime temperatures historically range from 49 to 87 degrees in Amador County (Westover Field Amador County Airport data).
- Increasing from 59 to 100 degrees results in less than 1 dB change in noise levels 1,000 feet away.
- Decreasing from 59 to 32 degrees results in less than 1 dB change in noise levels 1,000 feet away.
- Lower humidity results in slightly lower sound propagation over distance.
- □ Wind in the area has historically been 1-8 mph 80% of the time and variable in direction. Subtle variations in wind do not appreciably affect sound transmission.



## **Critical Components of Noise Analysis**

□ Extensive ambient noise surveys (6 days at 6 locations).

- □ Comprehensive monitoring of noise from all project components: (excavation, conveyors, crushers, screens, trucks, etc.).
- Local topography & ground cover was included in the state-of-the-art 3D noise prediction model.
- □ Atmospheric conditions were accounted for in the noise model.
- □ Off-site traffic noise was fully modelled (including project trucks).

### Critical Conclusions of the Noise Impact Analysis

- The Project complies with all applicable noise standards of the Amador County General Plan.
- The Project complies with the existing use permit noise standards at all property lines.
- The project satisfies the requirements of the California Environmental Quality Act (CEQA).
- The applicant/operator is proposing to include noise mitigation identified as being required for nighttime operations even though nighttime operations are no longer being proposed.



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