

**SUPPLEMENTAL EIS
RESPONSES TO COMMENTS**

SOUND

Sound SND-1500

SND-1500 Sound*1. Noise from a 500 acre site would be extremely audible from the Wilderness. (S3293)*

Response: As indicated in the sound impacts section in Chapter 4 of the EIS, mine operations noises would normally be audible for about 0.87 mile from the mill site, while in Alternatives IV and V the mill site would be located approximately 1.25 miles from the wilderness boundary. The project's sound transmission levels from the mill site at the wilderness boundary are estimated at 35 dBA (less than those in a quiet room), which would be similar to existing wilderness sound levels of 25 to 32 dBA. Areas of the Cabinet Mountains Wilderness which are not in line of sight with the mill site would not experience any noticeable increases in sound levels from project operations, although occasional project noise would be audible. There would be minor temporary impacts from the evaluation adit construction. The construction of the wilderness ventilation adit intake in the year 15 or later would briefly elevate wilderness sound levels during the construction period for up to two months on the surface. Because the ventilation adit would be driven from inside the mine and very little waste rock would be deposited on the surface (see Chapter 2 - Description of Alternatives for details), the wilderness construction period noise effects would be noticeable and temporary. The long-term noise effects of ventilation adit intake fan operations, under Alternatives III, IV, and V, would be elevated mechanical sound levels on about 12 acres of the Cabinet Mountains Wilderness (see the figure titled "Noise Influence Area in the Wilderness"), and at times, these sounds may be noticeable (but not above ambient background levels) at distances further than 400 feet from the ventilation intake adit grate. Presently, there are many areas within the wilderness where sounds from outside the wilderness are audible (see Chapter 4 - Wilderness apparent naturalness).

2. The best Alternative will not allow noise pollution via adits in the Cabinet Mountains Wilderness. (S3632)

Response: As described in the response above (1700-1) the potential noise impact is projected to be very slight. As mentioned in the final EIS, the development of an adit in the wilderness is only a possibility. The determination of need will not come about for about 15 years and then other ways of improving mine air quality will be considered.

3. How do you justify or define an acceptable level of noise? Is the mine going to be in a town? Typically, mines are out of town and relatively quiet. The only real noise to hear is blasting which can be controlled and done only during certain periods of the day, as is done in heavier populated areas. (S3918)

Response: The levels of sound impacts are influenced by three primary factors: (1) existing sound levels, (2) hearer-desired sound levels, and (3) the characteristics of and conduction from the sound source (see Chapter 4 - Sound for details). In this project area, there are three thresholds for assessing sound acceptability, (1) quiet wilderness sound levels (about 35 dBA) for areas within wilderness, (2) normal sound impact thresholds at which human health and welfare becomes adversely affected (55 dBA during day, 45 dBA at night) which are applicable in rural areas, and, (3) worker hearing damage levels for 8 hour exposure (90 dBA) (job site worker safety) (see figure Noise Comparison Chart for details). The two thresholds of concern for this project are the 55 dBA threshold around the projects proposed large mechanical operations (mill site, pumping stations, water treatment sites, and loadout facility), and the 35 dBA threshold for project activities affecting the Cabinet Mountains Wilderness. Under Alternatives III, IV, and V, the project's expected noise impacts would generally not exceed these two thresholds. The exception would be in the Cabinet Mountain Wilderness, where a mine intake ventilation adit could elevate noise levels (to 45 dBA) on an estimated 12 acres around the adit beginning in year 15 of project operations. As you indicate, blasting noise levels

would be occasional, would exceed noise thresholds for very short instances, and can be scheduled during daytime periods.

4. Page 4-153 Figure 4-5 A similar set of circles should be included for the Alternate Ventilation Site Portal so the impacts can be more readily visualized. The potential noise impacts would be affecting the most popular hiking area in the southern Cabinet Mountain Wilderness Area, the lovely high mountain meadows around Milwaukee Pass and Cliff Lake. In either scenario noise impacts would affect the popular ridge trail to Saint Paul Peak. Either adit will have a seriously detrimental effect on the wilderness esthetics for the 30 year life of the mine. This is a totally unacceptable impact for a wilderness area. (S471)

Response: The ventilation site that would be used in Alternatives II, IV, and V, is shown on Figure 4-11 (Noise Influence Area in the Wilderness). The “Alternatives III, IV, and V Ventilation Adit Portal” is shown as a triangle with a much smaller area of influence as compared to Alternative II’s sound impact circles. This much smaller impacted noise area results from the sound emission mitigations that would reduce surface sound levels at the intake ventilation adit grate from 67 dBA in Alternative II to 46 dBA in the alternatives III, IV, and V (approximately one percent of the total sound emission level proposed in Alternative II). The mine adit ventilation intake vent would be expected to elevate noise levels (to 45 dBA) on an estimated 12 acres around the air-intake ventilation adit beginning in year 15 of the project operations and continuing for the remaining 7 to 5 years of mine operations. As shown on Figure 4-11, the Milwaukee Pass and Copper and Cliff lakes areas would not be impacted by any adit noise. The sounds from the adit may only be slightly heard as one travels along the Ridge Trail to St. Paul Peak.