# APPENDIX D

# FUGITIVE DUST JSA

*This is a draft report and is not intended to be a final representation of the work done or recommendations made by Brown and Caldwell. It should not be relied upon; please consult the final report.*

| | | |
|---|---|---|
| **JSA NUMBER:** Yerington – 02 **DATE:** 07/03/02<br>NEW X<br>REVISION | **Company Performing the Job:**<br>Brown and Caldwell | **SUPERVISOR:** Charles Zimmerman<br><br>**SAFETY OFFICER:** Brian Bass |
| **JOB TITLE OR TASK:**<br><br>Air sampling for fugitive dust at mine site. | **TITLE OF PERSON(S) WHO PERFORMS JOB:**<br>Site Managers: Chad Leonard<br>Operations Technician: | **ANALYSIS BY:** Brian Bass<br><br>**REVIEWED BY:**<br><br>**APPROVED BY:** |

**RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT (PPE) AND/OR PERTINENT JOB SAFETY FORMS:** Hard hat, safety goggles or glasses, steel-toed boots. As appropriate: rubber gloves, face shield, rubber boots or hip waders, half-mask respirator.

| | | |
|---|---|---|
| 1. Setup PM-10 air sampling units at site. | 1. Dust inhalation<br>2. Electrical shock | 1. Avoid direct exposure to dust – keep face upwind of dust source or wear a half-mask respirator with dust cartridges.<br>2. Avoid contact with open or exposed wiring or terminals. Connect only low-voltage data cables; keep out of power and control wiring. |
| 2. Download data from meteorological weather station and collect/install filters on PM-10 units. | 3. Dust inhalation<br>4. Electrical shock | 3. Avoid direct exposure to dust – keep face upwind of dust source or wear a half-mask respirator with dust cartridges.<br>4. Avoid contact with open or exposed wiring or terminals. Connect only low-voltage data cables; keep out of power and control wiring. |
| 5. Disconnect and retrieve PM-10 units. | 5. Dust inhalation<br>6. Electrical shock | 6. Avoid direct exposure to dust – keep face upwind of dust source or wear a half-mask respirator with dust cartridges.<br>7. Avoid contact with open or exposed wiring or terminals. Connect only low-voltage data cables; keep out of power and control wiring. |
| 8. All Activities | 1. Slips, Trips, and Falls | 1. All personnel should be constantly watching for trip hazards such as uneven terrain, holes, ditches, stretched wires or ropes, or any other materials or pieces of equipment in their path.<br>2. Significant below-grade hazards (e.g., holes or trenches) should be marked with flagging, fencing or other appropriate means to make the obstacle easily identifiable.<br>3. Footwear appropriate for the terrain and work to be performed must be worn.<br>4. Muddy or wet conditions will warrant a more cautious work attitude. Employees should change work speed and style to fit the weather conditions. |
| 9. All Activities | 1. Back, hand, or foot injuries during manual handling of materials. | 1. Workers should inspect materials for slivers, jagged or sharp edges, and rough or slippery surfaces.<br>2. Workers should wipe off greasy, wet, slippery, or dirty objects before attempting to handle them.<br>1. In most cases, gloves or other protection should be used to prevent hand injuries.<br>2. Steel-toed boots should be used for protection of the feet when not in the water.<br>3. Routes should be surveyed for obstacles prior to moving materials from one location to another.<br>4. All three main factors in manual lifting (load location, task repetition, and load weight) must be considered when evaluating what is safe or unsafe to lift.<br>7. All manual handling of heavy or bulky objects should be carefully planned to avoid injuries and damage to equipment. |

| SEQUENCE OF BASIC JOB STEPS | POTENTIAL HAZARDS | PREVENTIVE OR CORRECTIVE ACTION |
|---|---|---|
| 5. All Activities | 1. Heat exhaustion or stroke. | 1. Avoid strenuous work in ambient temperatures over 80 degrees F.<br>2. Wear light-colored clothing, shaded sunglasses, and hat that provides shade and adequate air movement.<br>3. Find cool, shady area for breaks or respite from heat.<br>4. If worker feels dizzy, has a headache, has cool, moist, or pale skin or is weak, immediately move to a cooler environment, loosen tight clothing, provide air circulation to area, and provide small amounts of cool water to drink.<br>5. If worker has a change in level of consciousness, high body temperature, red, hot skin, rapid or weak pulse, or rapid or shallow breathing, call the emergency phone number and give care in accordance with #4 above. |
| 6. All Activities | 1. Hypothermia or frostbite. | 1. Avoid working in extreme cold.<br>2. Wear warm, layered clothing with adequate protection for hands and feet.<br>3. Find warm area out of the wind for breaks or respite from cold.<br>4. If worker experiences shivering, irregular pulse, numbness, glassy stare, impaired judgement, loss of muscle control with no shivering, or loss of consciousness, gently move worker to warm place, check vital signs, remove any wet clothing, cover with blankets and warm slowly.<br>5. If worker experiences loss of feeling or sensation in extremities, discolored or waxy skin, blisters or blue skin, remove wet clothing and jewelry, soak frostbitten area in warm water, cover with dry, sterile dressing (do not rub anything on the area), check vital signs. |
| 8. Unsafe conditions. | 1. All potential hazards. | 1. Where a situation presents a hazardous condition, the exposed employee will be removed from the hazardous area until all necessary precautions have been taken to eliminate the hazard and ensure their safety. |

| Personnel Signatures | | |
|---|---|---|
| **JSA NUMBER:** Yerington – 02 **DATE:** 07/03/02<br>NEW X<br>REVISION | **Company Performing the Job:**<br>Brown and Caldwell | **SUPERVISOR:** Charles Zimmerman<br><br>**SAFETY OFFICER:** Brian Bass |
| **JOB TITLE OR TASK:**<br><br>Air sampling for fugitive dust at mine site. | **TITLE OF PERSON(S) WHO PERFORMS JOB:**<br>Site Managers: Chad Leonard<br>Operations Technician: | **ANALYSIS BY:** Brian Bass<br><br>**REVIEWED BY:**<br><br>**APPROVED BY:** |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |