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|  | Job Safety Analysis | | |
| Portland State University | |  |
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| Facilities Services |  |  |
| Using an Angle Grinder | | |
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| **Task** | **Hazards** | **Controls** |
| 1. Check cord integrity. | Hand cut from cut wires. | Wear leather gloves.  Inspect slowly. |
| 2. Check conditions of grinding wheel and appropriate RPM. | (None foreseen) |  |
| 3. Check grinding wheel tightness. | Hand injury from inadvertent starting | Do not plug in the machine until inspection is complete. |
| 4. Verify the guard is tight and appropriate for the job. | Foot injury from dropping the tool | Rest the tool on the bench.  Wear steel-toed shoes. |
| 5. Verify the appropriate handle location. | Foot injury from dropping the tool | (See controls for Task 4.) |
| 6. Inspect trigger for physical damage and proper operation. | (None foreseen) |  |
| 7. Make sure the materials being ground are adequately secured and positioned correctly. | Injuries associated with the work propelled by the grinder and/or landing on you | Verify the work is adequately secured by trying to dislodge it with a gloved hand (the work weight may secure it enough).  Wear steel-toed shoes. |
| 8. Plug-in the grinder. | Eye and skin damage from projectiles. | Check the trigger switch to insure it is off. |
| 9. Begin grinding. | Eye injuries from projectiles and sparks | Wear safety glasses/goggles and a face shield. |
|  | Skin damage from sparks and projectiles | Wear leather gloves, long sleeved shirt, long pants, or leather welding guards. |
|  | Hearing loss | Wear ear plugs. |
|  | Ergonomic considerations. | Change position from time to time.  Wear vibration resistant gloves. |
|  | Inhalation of toxic or irritant fume or particulate | Wear the appropriate respirator based on the content of the metal and its coatings. Contact EH&S (5-3893) for evaluation and exposure assessment.  Use local or dilution ventilation to direct or collect fumes and/or particulate |
|  | **Required Training:**   1. Operation of the angle grinder 2. Hearing protection 3. Eye protection | **Required Personal Protective Equipment (PPE)**   1. Leather gloves 2. Eye and face protection 3. Body covering 4. Foot protection | |
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| **Other Information:** |  | | |
| **Contributors:** | Reviewed JKM | | |
| **Created:** | July 2006 | | |