### Job Hazard Analysis

**JHA Name:** Abrasive Blasting Cabinet

**Assessment Date:** 12-18-13  
**Building or Location:** North Mankato Campus  
**Revision Date:** 04-04-17  
**Department or Program:** Ag Mechanics Program

### Description of Individual Tasks or Assignments:

<table>
<thead>
<tr>
<th>Hazard Type(s) Associated with Task or Assignment:</th>
<th>Check for Exposure:</th>
<th>Specific Hazard Exposure:</th>
<th>Check if Exposure Recommends or Requires a Style of PPE?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Impact</td>
<td>X</td>
<td>Potential exposure to impact hazards generated by compressed abrasive blasting stream (e.g., injuries to hands &amp; arms)</td>
<td>X</td>
</tr>
<tr>
<td>2 Penetration or Cut</td>
<td></td>
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<tr>
<td>3 Crush or Pinch</td>
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<tr>
<td>4 Chemical or Harmful Dust</td>
<td>X</td>
<td>Potential exposure to abrasive blasting dusts, however glass beads are used with this cabinet which would negate the dust factor (e.g., respiratory irritation and illness), potential exposure to contaminates on work piece surfaces (e.g., dependent on surface coatings of work pieces)</td>
<td>X</td>
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<tr>
<td>5 Heat</td>
<td></td>
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<tr>
<td>6 Light (optical) Radiation</td>
<td></td>
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<td>7 Electrical Contact</td>
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<tr>
<td>8 Ergonomic/Human Factors</td>
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<tr>
<td>9 Environmental</td>
<td>X</td>
<td>Potential exposure to loud/ prolonged noise (abrasive blasting cabinet)</td>
<td>X</td>
</tr>
</tbody>
</table>

### Tools, Equipment, or Machinery Used when Performing Task:
- Abrasive Blasting Cabinet, and Abrasive Blast Materials
Job Hazard Analysis

Assessment Date: 12-18-13
Building or Location: North Mankato Campus

Description of Individual Tasks or Assignments:
Ablasive Blasting Tasks (e.g., Smoothing or Roughening Surfaces, Removing Paint and Contaminants, Shaping Material, Glass Etching, etc…).

Tools, Equipment, or Machinery Used when Performing Task:
Ablasive Blasting Cabinet, and Abrasive Blast Materials

Personal Protective Equipment Requirements:

| Eyes & Face | Safety Glasses with Side Shields or Goggles (Required when operating Abrasive Blast Cabinets) |
| Head & Ears | Hearing Protection Devices (Required when operating Abrasive Blast Cabinets) |
| Whole Body | |
| Feet | |
| Hands | Ablasive Blasting Cabinet Gloves- "attached to cabinet" (Required when operating Abrasive Blast Cabinets) |
| Respiratory | 1/2 Mask Respirators (Required when working in areas of where hazardous contaminate levels exceed OSHA PELs and When Cleaning or Adding Abrasive Media to Cabinet) |
| Other | |

Other Control Measures or Requirements (Engineering & Administrative Controls):

1. Physical Mobility - Movement from place to place on the job, considering distance and speed
2. Physical Agility - ability to maneuver body while in place or in static position
3. Physical Strength (Light to Moderate) - Ability to handle routine office materials and tools
4. Physical Strength (Moderate to Heavy) - Ability to handle 50lbs+ objects, considering frequency
5. Dexterity - skill and ability in using hands, fingers, and feet
6. Physical Balance - ability to maintain balance and physical control
7. Coordination - harmonious functioning of body parts (e.g., eye/hand, hand/foot, etc…)
8. Endurance - ability to sustain a prolonged stressful effort or activity with limited opportunity to rest

Physical Effort Definition/Examples:

1. Impact Hazards: Never point an abrasive nozzle/gun or direct its stream towards yourself. 4. Chemical or Harmful Dust Hazards: Personnel should receive Right-to-Know training (e.g., regarding chemical & physical hazards). SDS should be provided/available for all hazardous chemicals. Local Exhaust Ventilation (LEV) should be provided/maintained on abrasive blast cabinets. Respirators are available for personnel experiencing respiratory discomfort from dust generated; however, personnel (desiring to use respirators) and personnel required to wear respiratory equipment should receive a medical evaluation, Respirator training (e.g., regarding respiratory hazards), and fit-testing prior to wearing respirators. Respiratory equipment must be worn when cleaning the cabinet or adding abrasive materials. Never use abrasive cabinets with their access doors open. Open only the abrasive blast cabinet's doors when the abrasive dust has been removed from the cabinet by the LEV. 9. Environmental Hazards: Personnel should receive Hearing Conservation training (e.g., regarding noise hazards). Personnel using compressed air for cleaning/drying should be included in the Hearing Conservation Program. Miscellaneous Considerations: Dead-man switches or constant pressure triggers must be equipped on all abrasive nozzles/guns to stop air flow if the nozzle is released or dropped. Operators of tools, equipment, and machinery should read and follow all Manufacturer's recommendations/requirements (e.g., inspections, servicing/maintenance, safe usage, etc…). Any tools, equipment, or machinery found damaged, defective, or otherwise unsafe should immediately be removed from service and not used until repaired or replaced. Personnel should always consult their Supervisors on the selection and use of PPE for the tasks being performed.

Note: "This JHA provides only the minimum PPE/safety requirements necessary to safely complete the task or assignment, and the JHA only covers the hazards or exposures that are most likely to be encountered. Nothing within this JHA bars or restricts personnel from requesting higher degrees of PPE or control to mitigate workplace hazards. In addition, South Central College personnel (e.g., employees and students) are required to complete any applicable safety or on-the-job trainings required prior to performing their positions or participating in their programs of study. Finally, South Central College personnel should consult their supervisors/instructors, the college’s written safety programs/policies, and/or the Security & Safety Director whenever they have questions or concerns."

Certification: This document certifies a hazard assessment was conducted meeting the provisions specified under 29 CFR 1910.132 (d) and South Central College's related safety programs and policies.

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Date: 04-04-17