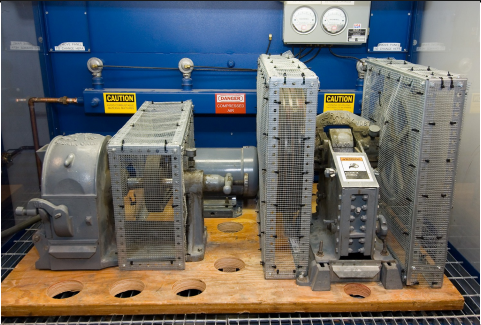


**APPENDIX C
EQUIPMENT/PHYSICAL HAZARD SOP**

EQUIPMENT/PHYSICAL HAZARD SOP																																						
<p>Equipment Name: Bico - Braun Rock Crusher and Pulverizer</p> <p>Equipment Application: Crushing and Grinding of Rocks and Minerals</p> <p>Principal Department & Location: Geoscience, Science G011</p>																																						
<p>Identified Health and Physical Safety Hazards:</p> <table style="width:100%; border: none;"> <tr> <td style="width: 33%;">Eye/Skin Hazards</td> <td style="width: 10%;"><input type="checkbox"/>Y <input type="checkbox"/>N</td> <td style="width: 33%;">Respiratory Hazards</td> <td style="width: 10%;"><input type="checkbox"/>Y <input type="checkbox"/>N</td> </tr> <tr> <td>Chemical Hazards</td> <td><input type="checkbox"/>Y <input type="checkbox"/>N</td> <td>Electrical Hazards</td> <td><input type="checkbox"/>Y <input type="checkbox"/>N</td> </tr> <tr> <td>Crush/Pinch Hazards</td> <td><input type="checkbox"/>Y <input type="checkbox"/>N</td> <td>Heat/Pressure Hazards</td> <td><input type="checkbox"/>Y <input type="checkbox"/>N</td> </tr> <tr> <td>Laceration Hazards</td> <td><input type="checkbox"/>Y <input type="checkbox"/>N</td> <td>Flying Debris Hazards</td> <td><input type="checkbox"/>Y <input type="checkbox"/>N</td> </tr> <tr> <td>Compressed Air Hazards</td> <td><input type="checkbox"/>Y <input type="checkbox"/>N</td> <td>Ionizing Radiation Hazard</td> <td><input type="checkbox"/>Y <input type="checkbox"/>N</td> </tr> <tr> <td>Noise Hazards</td> <td><input type="checkbox"/>Y <input type="checkbox"/>N</td> <td>Other: _____</td> <td><input type="checkbox"/>Y <input type="checkbox"/>N</td> </tr> </table>			Eye/Skin Hazards	<input type="checkbox"/> Y <input type="checkbox"/> N	Respiratory Hazards	<input type="checkbox"/> Y <input type="checkbox"/> N	Chemical Hazards	<input type="checkbox"/> Y <input type="checkbox"/> N	Electrical Hazards	<input type="checkbox"/> Y <input type="checkbox"/> N	Crush/Pinch Hazards	<input type="checkbox"/> Y <input type="checkbox"/> N	Heat/Pressure Hazards	<input type="checkbox"/> Y <input type="checkbox"/> N	Laceration Hazards	<input type="checkbox"/> Y <input type="checkbox"/> N	Flying Debris Hazards	<input type="checkbox"/> Y <input type="checkbox"/> N	Compressed Air Hazards	<input type="checkbox"/> Y <input type="checkbox"/> N	Ionizing Radiation Hazard	<input type="checkbox"/> Y <input type="checkbox"/> N	Noise Hazards	<input type="checkbox"/> Y <input type="checkbox"/> N	Other: _____	<input type="checkbox"/> Y <input type="checkbox"/> N												
Eye/Skin Hazards	<input type="checkbox"/> Y <input type="checkbox"/> N	Respiratory Hazards	<input type="checkbox"/> Y <input type="checkbox"/> N																																			
Chemical Hazards	<input type="checkbox"/> Y <input type="checkbox"/> N	Electrical Hazards	<input type="checkbox"/> Y <input type="checkbox"/> N																																			
Crush/Pinch Hazards	<input type="checkbox"/> Y <input type="checkbox"/> N	Heat/Pressure Hazards	<input type="checkbox"/> Y <input type="checkbox"/> N																																			
Laceration Hazards	<input type="checkbox"/> Y <input type="checkbox"/> N	Flying Debris Hazards	<input type="checkbox"/> Y <input type="checkbox"/> N																																			
Compressed Air Hazards	<input type="checkbox"/> Y <input type="checkbox"/> N	Ionizing Radiation Hazard	<input type="checkbox"/> Y <input type="checkbox"/> N																																			
Noise Hazards	<input type="checkbox"/> Y <input type="checkbox"/> N	Other: _____	<input type="checkbox"/> Y <input type="checkbox"/> N																																			
<p>Other/Process Comments: Equipment produces rock chips and silica dust when in operation.</p>																																						
<p>Hazard Control Strategies:</p> <p>Engineering Controls:</p> <table style="width:100%; border: none;"> <tr> <td style="width: 30%;">Ventilation Required</td> <td style="width: 10%;"><input type="checkbox"/>Y <input type="checkbox"/>N</td> <td style="width: 60%;">Device operated in hood with draw down HEPA filter</td> </tr> <tr> <td>Isolation Required</td> <td><input type="checkbox"/>Y <input type="checkbox"/>N</td> <td></td> </tr> <tr> <td>Wet Methods</td> <td><input type="checkbox"/>Y <input type="checkbox"/>N</td> <td></td> </tr> <tr> <td>Machine Guarding</td> <td><input type="checkbox"/>Y <input type="checkbox"/>N</td> <td>Device uses with guards at 3 belts and point of operation</td> </tr> </table> <p>Administrative Controls:</p> <table style="width:100%; border: none;"> <tr> <td style="width: 30%;">Training Required</td> <td style="width: 10%;"><input type="checkbox"/>Y <input type="checkbox"/>N</td> <td style="width: 30%;">Signage Required</td> <td style="width: 10%;"><input type="checkbox"/>Y <input type="checkbox"/>N</td> </tr> <tr> <td colspan="4"><input type="checkbox"/> Other (specify) Once trained, personnel may operate without direct supervision</td> </tr> </table> <p>Personal Protective Equipment Required (check all that apply):</p> <table style="width:100%; border: none;"> <tr> <td style="width: 25%;"><input type="checkbox"/> Safety glasses</td> <td style="width: 25%;"><input type="checkbox"/> Chemical goggles</td> <td style="width: 25%;"><input type="checkbox"/> Face shield</td> <td style="width: 25%;"><input type="checkbox"/> Apron</td> </tr> <tr> <td colspan="2"><input type="checkbox"/> Gloves (type _____)</td> <td colspan="2"><input type="checkbox"/> Other (specify) N-95 dustmask</td> </tr> </table> <p>Emergency Controls Available:</p> <table style="width:100%; border: none;"> <tr> <td style="width: 30%;">Chemical Spill Kit</td> <td style="width: 10%;"><input type="checkbox"/>Y <input type="checkbox"/>N</td> <td style="width: 30%;">First Aid Kit</td> <td style="width: 10%;"><input type="checkbox"/>Y <input type="checkbox"/>N</td> </tr> <tr> <td>Fire Extinguisher</td> <td><input type="checkbox"/>Y <input type="checkbox"/>N</td> <td>Emergency Shower/Eye Wash</td> <td><input type="checkbox"/>Y <input type="checkbox"/>N</td> </tr> </table>			Ventilation Required	<input type="checkbox"/> Y <input type="checkbox"/> N	Device operated in hood with draw down HEPA filter	Isolation Required	<input type="checkbox"/> Y <input type="checkbox"/> N		Wet Methods	<input type="checkbox"/> Y <input type="checkbox"/> N		Machine Guarding	<input type="checkbox"/> Y <input type="checkbox"/> N	Device uses with guards at 3 belts and point of operation	Training Required	<input type="checkbox"/> Y <input type="checkbox"/> N	Signage Required	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> Other (specify) Once trained, personnel may operate without direct supervision				<input type="checkbox"/> Safety glasses	<input type="checkbox"/> Chemical goggles	<input type="checkbox"/> Face shield	<input type="checkbox"/> Apron	<input type="checkbox"/> Gloves (type _____)		<input type="checkbox"/> Other (specify) N-95 dustmask		Chemical Spill Kit	<input type="checkbox"/> Y <input type="checkbox"/> N	First Aid Kit	<input type="checkbox"/> Y <input type="checkbox"/> N	Fire Extinguisher	<input type="checkbox"/> Y <input type="checkbox"/> N	Emergency Shower/Eye Wash	<input type="checkbox"/> Y <input type="checkbox"/> N
Ventilation Required	<input type="checkbox"/> Y <input type="checkbox"/> N	Device operated in hood with draw down HEPA filter																																				
Isolation Required	<input type="checkbox"/> Y <input type="checkbox"/> N																																					
Wet Methods	<input type="checkbox"/> Y <input type="checkbox"/> N																																					
Machine Guarding	<input type="checkbox"/> Y <input type="checkbox"/> N	Device uses with guards at 3 belts and point of operation																																				
Training Required	<input type="checkbox"/> Y <input type="checkbox"/> N	Signage Required	<input type="checkbox"/> Y <input type="checkbox"/> N																																			
<input type="checkbox"/> Other (specify) Once trained, personnel may operate without direct supervision																																						
<input type="checkbox"/> Safety glasses	<input type="checkbox"/> Chemical goggles	<input type="checkbox"/> Face shield	<input type="checkbox"/> Apron																																			
<input type="checkbox"/> Gloves (type _____)		<input type="checkbox"/> Other (specify) N-95 dustmask																																				
Chemical Spill Kit	<input type="checkbox"/> Y <input type="checkbox"/> N	First Aid Kit	<input type="checkbox"/> Y <input type="checkbox"/> N																																			
Fire Extinguisher	<input type="checkbox"/> Y <input type="checkbox"/> N	Emergency Shower/Eye Wash	<input type="checkbox"/> Y <input type="checkbox"/> N																																			
<p>SOP Completed By:</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center;">Dave Tewksbury</td> <td style="width: 33%; text-align: center;"><i>Dave Tewksbury</i></td> <td style="width: 33%;"></td> </tr> <tr> <td style="text-align: center;">Name</td> <td style="text-align: center;">Signature</td> <td style="text-align: center;">Date</td> </tr> </table>			Dave Tewksbury	<i>Dave Tewksbury</i>		Name	Signature	Date																														
Dave Tewksbury	<i>Dave Tewksbury</i>																																					
Name	Signature	Date																																				