Lab Hazard Trigger Grid

The Lab Hazard Trigger Grid is used as a tool to complete hazard assessment and planning for research activities as defined in The Dow Chemical Company R&D Management of Change Work Process.
## Lab Hazard Risk Assessment Grid

<table>
<thead>
<tr>
<th>Emphasis Areas</th>
<th>Hazards to Consider</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General Considerations</strong></td>
<td>Is a Pre-Start Up review/walk-through required?</td>
</tr>
<tr>
<td></td>
<td>Is an EH&amp;S contact required to review the changes and be present at the prestart-up walk-through?</td>
</tr>
<tr>
<td><strong>General Changes</strong></td>
<td>Change in Personal Protective Equipment Requirements</td>
</tr>
<tr>
<td></td>
<td>New Person/Operator</td>
</tr>
<tr>
<td>New procedure or change to existing procedure</td>
<td></td>
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<tr>
<td>Sale of Product</td>
<td></td>
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<tr>
<td>Ergonomic Hazards</td>
<td></td>
</tr>
</tbody>
</table>

### Operating Pressure
- Glassware
- Metal
- Non-glassware/non-metal (e.g. PVC, teflon, polyethylene tubing, tygon tubing)

### Temperature
- Ovens or equipment operating at elevated temperatures
- Cryogenic materials

### Operation
- Unattended operation
- Change impacts existing safety devices

### Equipment/Area
- Electrical Sources
- New or modifications to radiation sources
- Decommissioning a lab/area
- New or modifications to equipment larger than laboratory bench scale
- New or modified laboratory bench scale equipment/instrumentation where changes are not covered under a separate trigger

### Ventilation System
- New ventilation system
- Using existing ventilation in a new/different way

### Health
- OSHA Corrosive, Carcinogen, Reproductive Toxin
- Asphyxiant, lung damage, sensitizer, hepatotoxins, nephrotoxins, neurotoxins, blood toxins, nervous system toxins

### Flammability
- Flammable gas (including gas generation from the reaction), Flammable liquids: Materials with FP <73°F, NFPA Class IA or IB
- Flammable material NFPA Class IC, Materials with FP >73°F to <100°F
- Combustible liquids: NFPA Class II, IIIA, IIIB, Materials with a FP > 100°F and less than 200°F

### Reactivity
- OSHA Organic Peroxide, OSHA Explosive, OSHA Unstable (Reactive)

### Combustible Dusts
- Work involving the use of or the potential to create combustible dusts through handling/processing.
- Potential hazard for a flash fire or explosion exists when a dust cloud is suspended in air, or if dust covers surfaces due to poor housekeeping.

### Flammable Solids
- A solid, other than a blasting agent or explosive, that is liable to cause fire through friction, absorption of moisture, spontaneous chemical change, or retained heat from manufacturing or processing, or which can be ignited readily, and when ignited, burns so vigorously and persistently as to create a serious hazard.

### Thermodynamics
- Potential Energy Release for Desired Reaction