**AREA HAZARD ANALYSIS**

Title:  DIRC Detector  
Location (Bldg & Rm):  620

Instructions:

An Area Hazard Analysis (AHA) is a process that is used to evaluate a work area to 1) determine the hazards that may be present, 2) determine appropriate controls for these hazards and, 3) provide a mechanism to communicate these hazards to someone entering the area. The AHA covers the facility and equipment within the facility. It does not cover specific jobs/tasks that may be performed in the area. Job/task specific hazards and controls are covered by the JHA process.

The AHA should be done by the area manager, in cooperation with the Building Manager. An AHA should be done once for all working areas and whenever there is a change in to the facility or regulations or the introduction of new equipment or new hazard.

Complete instructions and supporting information is available at <web site under development>. Enter information into boxes which will expand to accommodate whatever length of text is entered. Once this AHA is complete, the area responsible person signs.

<table>
<thead>
<tr>
<th>Processes/Equipment in Area</th>
<th>Hazards</th>
<th>Controls &amp; Recommended Actions</th>
</tr>
</thead>
</table>
| General working environment. Entering unfamiliar areas or areas with unknown or changing hazards | Egress  
Emergency response  
Potential poor visibility  
General BaBar Hazards  
See IR-2 Specific AHA | Know location of exits, fire equipment, and safety equipment such as eyewashes.  
Never work alone in the area.  
“Fire Extinguisher” sign above each fire extinguisher.  
Single turn handles on exit doors.  
Doors remain unlocked when occupied.  
Aisle space maintained.  
Emergency lighting system in each room  
Signage: “Exit” or “Not an Exit” on portals.  
Observe postings and warning signs  
Be aware of your surroundings  
Contact area manager or other knowledgeable person if unsure of hazards.  
Respect and heed alarms. |
| Extensive computer work, data entry / email; talk on phone | Carpel Tunnel injuries  
Back pain | Have ergonomic evaluation preformed and workspace adjusted accordingly |
| Eye strain | Use good posture when at workstation  
Be sure to use ergonomically correct chair  
Take regular breaks (~every 15 minutes or so) |
|-----------------|------------------------------------------|
| Computer, desk, shelving, file cabinet chairs | Head injury from objects falling off shelves  
Strains from moving equipment, furniture | Secure shelving securely to wall. Place heavy objects on lower shelves and lighter objects on higher shelves. Do not sit under shelving with heavy objects  
Do not move heavy furniture alone  
Avoid back injuries by lifting or pushing with legs not back. |
| Walking and working surfaces | Slips, trips, and falls over transient hazards (power cords, temporarily stored machinery, and work-in-progress) | Remove trip hazards to keep aisles clear.  
Clean up spills immediately.  
Do not run. Keep eyes on path while walking.  
Use handrails |
| Entering shops or other industrial areas on site | Moving equipment, electrical, fall hazards. Not all hazards may be obviously identified. | Use caution, read and obey signs. Consider asking for escort. |
| Overwork | Stress, inattention/lack of focus | Reduce stress by clarifying tasks and priorities - do what you can; Identify and address self-induced stress; not rushing; discuss at safety meetings; talk with supervisor and/or peers for reality check |
| Soldering | Burn  
Inhalation of fumes | Use protective holder to store heated iron.  
Properly dispose of solder dross  
Use in well ventilated areas |
| Hand Tools | Personnel exposure via: Inappropriate use of tools for task at hand. Lack of attention to task. | Use correct tools(s) for the job and make sure they are in good condition.  
GFCI for all electrical plug in tools.  
Pay attention to your own job and your surroundings.  
Report all unsafe tools to machine shop manager.  
PPE: Protective eyewear, gloves, machine shop garb as required for level of hazard. |
| Handle radioactive materials. | • removal of radioactive materials and mix in with non-radioactive materials  
--- | • generation of “mixed waste” | • Do not remove materials that are not properly tagged by OHP.  
--- | • When going into radiation areas, “take out what you bring in” to avoid activating. This is especially important for hazardous materials such as solvents, oils, greases, aerosol products, etc. that would become “mixed waste” if activated.  
--- | Training:  
--- | • General Employee Radiological Training (GERT) (Course 115) to handle radioactive material if this will not exceed annual dose limit of 100 millirem/year. |  |
| Working in tight spaces | • Bumping into things with body or head  
--- | • Trip hazards  
--- | • Getting into each others way | • avoid rushing  
--- | • wear hard hat/ wear bump hat  
--- | • practice good housekeeping  
--- | • be aware of your surroundings |  |
| Install/repair/ work around equipment with energy sources. Work around high voltage power supplies and other electrical exceeding 50V | • exposure to source of energy  
--- | • Burn  
--- | • electrocution  
--- | • trip | • Talk to area managers before working in areas  
--- | • Know how to properly use equipment that verifies equipment is de-energized  
--- | • Understand the equipment  
--- | • Communicate frequency and clearly with co-workers about the status of electrical work  
--- | • Don’t rush  
--- | • Training  
--- | • Electrical Safety for non-electrical workers (Course 239)  
--- | • Electrical Safety for R&D Equipment (Course 251) |  |
| Work with electronic/electrical devices (computers, lights, coffee pots, scopes) | Shock hazard | • Don’t daisy chain  
--- | • Don’t or overload circuits (limit items plugged into power strips to 5 amps or less)  
--- | • Have damaged power cords replaced.  
--- | Training: Electrical safety for non-electrical workers (course 239) |  |
<table>
<thead>
<tr>
<th>Signatures:</th>
<th>Print Name</th>
<th>Signature or Initialed</th>
<th>Date</th>
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<tbody>
<tr>
<td><strong>Area Responsible:</strong></td>
<td></td>
<td></td>
<td>11/19/03</td>
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<tr>
<td><strong>Participants:</strong></td>
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