APPENDIX L

Hazard Assessment and Hazard Assessment Certification Examples

"Hazard assessment" is the process (required by law) of identifying the hazards associated with defined task, prescribing personal protective equipment and other relevant protection measures which must be employed to reduce the risk from the hazards.

"Certification of Hazard Assessment" is a written document -- such as the examples #1 and #2 following in this appendix -- which gives the complete requirements for PPE (and sometimes other protective equipment or procedures) for every hazardous task or job description in the work area. The supervisor is responsible for ensuring that hazard assessments are performed and the certification(s) written and posted in each work area. The supervisor may delegate or contract the labor involved in this process, but cannot reassign or disclaim the responsibility.

Strict adherence to any of the examples is not required, so long as the hazard assessment certification

- identifies the workplace -- building and room(s),
- identifies the document as a certification of hazard assessment,
- is signed by the supervisor to certify/validate that supervisor has approved the assessment
- bears the date of the hazard assessment
- meets the legal requirements of specifying exactly which PPE is to be used and the task(s) or job description(s) which require it, and which .

INSTRUCTIONS

- **You may save the REM website example hazard assessment certifications (rtf files are provided) to your computer or network and use them to help with creating your own.**
- **If you do this you must modify any example you use so that it meets all the specific hazards of your work area. This includes removing or adding hazards as applicable to your work area. For example do not post required PPE for "Arc and TIG welding" if neither of these operations is undertaken in your work areas.**
- **Certification(s) of hazard assessments must be posted -- tacked or hung in a visible place -- in every work room listed in the "location(s)" field.**
- **The fields at the beginning -- date(s), location(s), supervisor, and signature -- must be completed.**
- **Be very aware that once these are posted they become rules which must be enforced.**

Post signed certification in work rooms.

Supervisor (print): _____	Dept_____	Assessment Date(s): _____
Signature: _____	Posted: bldg _____ room(s) _____	

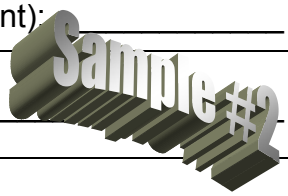
Hazards	**Task:** hands-on work or being within reach[a] of potential hazards of described activity/items:	**Minimum Requirements**
Skin/eye damage, poisoning, inhalation of vapor or aerosol	Volume > 10 mL any unshielded[b] corrosive[c] liquids, organic liquids or liquid mixtures, or toxic[d] inorganic liquids/mixtures	Splash goggles, chemical resistant gloves[e], lab coat, skin cover to knees/elbows/throat, closed shoes with socks. Work in hood[f]. Shower and eyewash must be available in work area.
	Volume > 1 L	Same, but cover to ankles/wrists/throat
	Volume > 5 L	Add face shield covering chin
Conjunctivitis, corneal damage, erythema	Arc/TIG welding	Appropriate shaded goggles Working gloves
Skin/limb injury	Machine operation activities likely to catch clothing, hair, or jewelry	Bind vulnerable clothing/hair, remove jewelry
Eye impact	Metalworking, woodworking, other operations likely to throw particles	Safety glasses No loose clothing or jewelry
Head impact	Working or walking in area having potential of falling tools, equipment, or stored items	Hard hat
Skin/eye damage	Cryogenic liquids	Splash goggles, skin cover to elbows/knees/throat, closed shoe easily removed, socks. Cryogloves for dispensing.
	Volume > 1 L	Skin cover to throat/wrists/ankles
Frostbite, eye impact	Dry ice, very cold frozen solids.	Safety glasses, insulated gloves, skin cover to elbows/knees/throat, closed shoe w/ socks
Skin/eye damage	Hot liquid (rxn mixture, water bath, oil bath, autoclave, still...)	Splash goggles, insulated gloves, skin cover to knees/elbows/throat, closed shoe w/ socks
Eye damage, Erythema	Harmful UV radiation to eyes	UV blocking goggles, skin cover on all potentially exposed areas
	Potential face harmful UV exposure	UV face shield
Skin/eye damage	Laser radiation	Goggles appropriate to beam parameters, closed shoe, no jewelry/reflective items
	Class 3b and 4 lasers	Skin cover on all potentially exposed areas
Infectious disease	Human blood, cells, tissue, body fluids or materials derived from same	Safety glasses, "exam" gloves, skin cover on all potentially exposed areas, shoes/socks, work at Biosafety Level II.
	Liquid with vol > 1 mL	Same, but splash goggles, skin cover to throat/wrists/ankles
Skin/eye damage, poisoning, inhalation of airborne dust	Hazardous solids	Safety glasses, goggles for large quantities, chemical resistant gloves, skin cover to elbows/knees/throat, closed shoes/socks

NOTES

(a) Being within reach of potential hazards: "within reach" varies widely depending on scale and conditions of work and will be judged by affected staff in each room.
(b) Unshielded: not behind a drawn hood sash or blast shield.
(c) Corrosive: pH $\geq$ 12 or pH $\leq$ 2.5
(d) Toxic: having any poisonous or irritating effects to human tissue or human health.
(e) Chemical resistant gloves: glove thickness, length, and material must be chosen carefully and will be specific to the chemicals/mixtures used and the process conditions.
(f) Hood: 100% exhaust to outside, current approval for "all work" and functioning properly.
(g) Chemicals requiring designated areas: full list is in Appendix G.

Assistance performing Hazard Assessment and writing the Hazard Assessment Certification is available. Contact the REM Laboratory Safety specialist.

Supervisor (print): _____	Dept_____	Assessment Date(s): _____
Signature: _____	Posted: _____ bldg _____room(s)	



Task/Assignment description or job title:

PREPARATION OF FAT SAMPLES FOR GAS LIQUID CHROMATOGRAPHY OF ORGANOCHLORINE PESTICIDE RESIDUES

Hazards identified:

Eye/Face:	chemical splash	Respiratory:	respiratory exposure to hexane
Head:		Foot:	chemical spill
Electrical:		Hand:	tissue sample pathogen, or chemical splash,
Whole body:	chemical splash	Other:	

PPE Requirements:

Eye/Face:	chemical splash goggles at all times during procedure	Respiratory:	All work to be done in chemical hood
Head:		Foot:	shoes covering toe, heel, top of foot
Electrical:		Hand:	11 mil polyvinyl choride gloves above wrists
Whole body:	lab coat and other cover to wrists and throat and knees	Other:	

Use of this format for the certification of hazard assessment requires that a separate certification be prepared for every task, or for every job description.

Certification statement:

Supervisor has signed above to certify that this hazard assessment was conducted on the dates shown and is to be enforced for this task