Project EHS Evaluation Checklist – Change/Construction

1. Demo/Construction
   a. Are there any asbestos materials (pre-1989 building) - notification and management required
   b. Lead paint? Pre-1978 building
   c. PCB caulk? Pre-1980 building
   d. Decontamination of fume hoods, biosafety cabinets, etc.
   e. How will waste be managed, especially chemical waste
   f. Will aerial lifts be required
   g. Will there be trenching or excavating? Review contractor qualifications, training, and safety plan.
   h. Will there be work at heights? Review contractor qualifications, training, and safety plan.
   i. Has contract been written to require vendors to provide SDS’s for all chemicals brought on site.

2. Physical Layout
   a. New electrical system or circuit installed?
   b. Electrical system or circuit modified so that it could overload a system/affect arc flash hazard?
   c. Does existing hazard warning signage (for modifications) need to be changed?
   d. New or modified fire prevention system?
   e. Is an egress route altered (temporary or permanent)?
   f. Is a door secured or interlocked that previously was not?
   g. Is access for maintenance or emergency response reduced?

3. Equipment
   a. Will local ventilation be required?
   b. Will a new utility be installed or will there be a significant change (increase or decrease) in load on an existing system?
   c. Is all new equipment provided with adequate mechanical guarding
   d. What is the expected noise level in the space – does it approach 85 dB
   e. Ergonomic design

4. Environmental
   a. Will more than 1 acre be disturbed? Stormwater general permit submission BEFORE work begins
   b. Will a source of air emissions (generator or boiler or solvent bath cleaner for example) be changed or replaced? Could require permit change BEFORE work begins.
   c. Are new tanks being installed?
   d. Will the use or storage of a hazardous substance increase or decrease?
   e. Will equipment containing a refrigerant/halon be added, repaired, modified or removed?
   f. Will a source of ionizing or non-ionizing radiation be added or removed?
5. Hazardous Materials/Hazard Communication
   a. Will a new hazardous substance be introduced or will the quantity of an existing hazardous substance be significantly increased or decreased? (chemical, biological, radiation, regulated materials, etc.)
   b. Has the contractor provided SDSs for hazardous materials they will bring on site?
   c. Has the VU employee responsible for the work provides SDSs for hazardous materials to which the contractor employees may be exposed?

6. Work Tasks
   a. Will there be a change in emergency planning or procedures?
   b. Will new or modified EHS documentation be required (labels, procedures, warning signs, etc.)?
   c. Will engineering controls (hoods, ventilation systems, barriers, etc.) be modified?
   d. Will any work be performed in a confined space?
   e. Will any work involve burning / welding / cutting?
   f. Will any work be performed that will require lockout of electrical or mechanical equipment?

7. Training
   a. Will a new EHS training program need to be developed or will an existing program need to be modified?
   b. Has the contractor provided a copy of their Safety Plan?
   c. Has the contractor been advised of VU safety policies they must follow?

8. Design
   a. Will there be significant storage of flammable materials in the new space – explosion proof wiring could be required.
   b. All new electrical panels, equipment should come WITH required NFPA 70e labeling
   c. If maintenance (or window washers?) will require work on the roof of the building, include anchorage points in the design.
   d. Have HVAC systems been designed to enable year round humidity management?
   e. Has easy access for maintenance been built into design
   f. IS THERE ADEQUATE STORAGE SPACE
   g. Are walking surfaces slip resistant?
   h. Will corrosive materials be used – shower/eyewash with tepid water required. Assure location is conducive to testing.
   i. Does design minimize confined spaces?
   j. Flammable storage cabinet space if required
   k. Chemical storage space/shelves with lips
   l. Are interlocks required for safe operation and maintenance and are they provided
   m. Is all new equipment provided with adequate mechanical guarding
   n. Are interlocks required for safe operation and maintenance and are they provided
   o. Adequate outlets
   p. Space for waste segregation (inc. recycling)
q. Is gas cylinder anchorage provided
r. Are floor mats provided in areas where there will be long periods of standing
s. Is secondary containment provided for hazardous materials
t. If respiratory protection equipment is to be stored in area, is dedicated storage space provided
u. Is local-specific fire suppression required?
v. Is specific air monitoring required (due to presence of specific gases)?
w. Is backflow prevention required/addressed?
x. Designed for pest control prevention (whole book)

9. Laboratory Specific Design
   a. Fume hood
   b. Biosafety cabinet
   c. Flammable storage cabinet
   d. Is additional laboratory security required due to the nature of the chemicals or processes