

E. LABORATORY OPERATIONS WHICH REQUIRE PRIOR APPROVAL

In general, prior approval must be obtained when a laboratory procedure presents a significant risk of injury, illness, or exposure to hazardous substances. The risk is considered significant when there are very large quantities of particularly hazardous substances involved or the experimental procedures exacerbate the potential for a hazardous condition. Obviously, these conditions must be applied on a case-by-case basis.

Prior Review and Approval by a Principal Investigator:

For routine operations, other than those detailed under "Prior Review and Approval by a Unit Safety Committee," the principal investigator, or someone designated^A by the principal investigator, may review and approve operations by completing the "Safety Review and Approval Checklist," copy attached. Only principal investigators or their designees who have attended University-sponsored Laboratory Standard Training may review and approve these laboratory operations^B.

Prior Review and Approval by a Unit Safety Committee:

The following would require prior approval by the Unit Safety Committee before proceeding with a particular experiment or activity:

- When it is likely that occupational exposure limits^C could be exceeded or that other harm is likely.
- When there is a failure of any of the equipment used in the process that did or could have resulted in injury, illness, or exposure of a laboratory worker to a hazardous material, the Unit Safety Committee must grant approval before the procedure may be undertaken again.
- When any laboratory workers become ill or suspect that they or others have been exposed due to any experimental procedure.

Principal investigators who wish to obtain prior approval from the Unit Safety Committee must provide to the committee the information on the "Request for Prior Approval" form, copy attached. If animals are to be used in this research activity, you must obtain approval from the Rutgers Institutional Review Board for the Use and Care of Animals.

^A The principal investigator may designate the responsibility for this review to a senior laboratory person. This person must have not only the responsibility for safety in the laboratory, but must also have the authority to enforce and implement safety procedures and policies in the laboratory.

^B Until the guidelines become fully operational, this requirement will be waived for those individuals who have not yet received this training, but have attended Rutgers University NJ Right-to-Know training.

^C At Rutgers University, these occupational exposure limits include either Threshold Limit Values (TLVs), which are established by the American Conference of Governmental Industrial Hygienists (ACGIH) or Permissible Exposure Limits (PELs) promulgated by Federal OSHA, whichever is LOWER.

SAFETY REVIEW AND APPROVAL CHECKLIST

Name of Operation: _____

Location: _____

Principal Investigator: _____

Department: _____

Date ____/____/____

List all individuals who have been trained in this procedure:

General

Provide a brief description of the activity that will be carried out. Activities can include, but are not limited to: a particular reaction, a reaction system, use of a particular chemical, use of addition of new components to a new or old system, initiation of a new research project, or the addition of a new chemical to an old procedure. If available, a copy of the written procedure may be attached to satisfy this requirement.

Questions

Answer Yes or No

1. Have you identified and addressed all hazards associated with materials, equipment and procedures? _____

Summarize the hazards that may be encountered, including: toxicity, flammability, pressure, vacuum, temperature extremes, noise, explosivity, etc.

2. Are their written procedures for what you are doing? _____

3. Are current copies of the most recent MSDSs for the material available? _____

The information on the MSDS should be reviewed with all individuals who will be involved in this procedure. The MSDS must be readily available.

4. Have all individuals been trained and do they understand the written procedures? _____

5. Has the potential for emergency situations been addressed (e.g. runaway reaction, loss of temperature control, etc)? _____
6. Are shut-offs for bottled gases or other critical valves/shut-offs located where they can readily and safely be reached and closed? _____
7. Are specific emergency shutdown instructions posted and visible? _____
Post emergency shutdown procedures for all overnight and unattended operations. Ensure that there is a current Caution Sign posted on the laboratory door.
8. Is appropriate protective equipment (e.g. gloves, goggles, face shields, lab coats, etc.) available and being used? _____
For assistance on selecting proper protective equipment at (732) 445-2550.
9. Are all individuals familiar with what to do in the event of accidental contact (e.g. inhalation, ingestion, skin contact)? _____
This information is available on the MSDS.
10. Are all individuals familiar with what to do in the event of a spill or other emergency? _____
This information may be found on an MSDS. Additional information may be obtained by contacting REHS.
11. Are you using the least hazardous materials and minimum practical quantities for your needs?
12. Is appropriate safety equipment available and in working order (e.g. fume hoods, glove boxes etc.)? _____

If any question above is answered with a "NO", please explain, below.
Also, add any additional comments below.

Request for Prior Approval by the Unit Safety Committee

Date of Request _____

Principal Investigator _____

Department Chair _____

Department _____

Building – Room _____

Phone _____

CHEMICAL TO BE USED

Name CAS No. _____

Synonyms _____

Location of Use _____

Use Condition _____

Location of Storage _____

Period/Frequency of Use _____

Quantity of to be Procured _____

PERSONNEL PROPOSED FOR THIS PROJECT

EXPERIMENTAL PROCEDURES

Briefly describe the procedures that will involve the use of this material.

CONTROL PROCEDURES

Describe controls that will be employed to protect the individuals participating in this research.

DECONTAMINATION AND DISPOSAL

Decontamination Procedures (surfaces, materials, instruments, equipment, etc.):

Disposal Procedures (wastes and unused stock):

EMERGENCY PROCEDURES

In the event of overt personnel exposure (inhalation, ingestion, inoculation):

In the event of environmental contamination (spill):

MONITORING PROCEDURES (IF REQUIRED BY THE USC)

Medical and/or personnel monitoring procedures for evidence of personnel exposure

Monitoring procedures to detect environmental contamination
