INTRODUCTION

This document outlines Environmental Health & Safety (EH&S) requirements and process for decommissioning chemical fume hoods.

REQUIREMENTS

- All projects including the removal of a chemical fume hood must be submitted to EH&S Building Codes Enforcement (352-392-1591) for plan review and permitting. This review will ensure that all relevant building and fire codes are addressed during the project.
- Work must not start until EH&S Laboratory Safety Program has received the decontamination form. EH&S will review the form for potential chemical or radiological hazards present in the fume hood.
- EH&S Laboratory Safety Program requires the following Personnel Protective Equipment (PPE) as a minimum for any personnel involved in decommissioning:
  - Tyvek suits, safety goggles, and nitrile gloves. (Cut-resistant gloves may be needed when cutting or handling ductwork).
  - Respiratory protection is required if dust generating activities will occur, such as cutting of ductwork. Contact EH&S’s Industrial Hygiene Group for more information on respiratory protection requirements.
- Chemical fume hoods and ductwork recorded as asbestos containing materials MUST be handled by an asbestos abatement company with both asbestos contractor (removal) license and asbestos business license from the State of Florida Department of Business and Profession Regulation.
- **ALL** wastewater generated from the removal process must be directed into the sanitary sewer. **NO** wastewater can enter the Storm Sewer, immediately report all releases to EH&S.

PROCESS

1. Submit project plans to EH&S Building Codes Enforcement for review and approval.
2. Submit Decontamination form to EH&S Laboratory Safety Program. Once approved by EH&S, you will receive a copy. Maintain a copy of the signed form in your records.
3. Wash down the chemical fume hood and exhaust stack. Use appropriate PPE
   a. Use free flowing water only, **NO** pressure washer (chemical reactions may occur).
      i. Route all wastewater either directly into the sanitary drain or collect for drain disposal.
      ii. Use a detergent solution, such as trisodium phosphate (TSP).
   b. Wash from the top of the exhaust system towards the chemical fume hood.
      i. Remove the fan from the housing and rinse outside the building in a collection tub.
      ii. Rinse from the stack top towards the fan housing.
Chemical Fume Hood Decommissioning

iii. Rinse from the fan housing to the chemical fume hood outlet.
iv. Rinse the inside of the chemical fume hood, includes the area behind the baffles.

4. Ductwork demolition.
   a. **DO NOT** break ducts until they have been washed, since hazardous materials may buildup in the joint.
   b. Spray all joints as separated to reduce the generation of harmful dust.

5. Removal of the chemical fume hood.
   a. Disconnect all electrical and plumbing as approved by EH&S Building Codes Enforcement.
   b. Cap exhaust ductwork as approved by EH&S Building Codes Enforcement.

SPECIAL CONSIDERATION FOR RADIATION FUME HOOD

For fume hoods that were used with radioactive materials have additional safety consideration.

- Environmental Health and Safety’s Radiation Safety (352-392-7359) must survey any chemical fume hood and ductwork where radioactive materials were used before they can be removed.
- This is a multi-step process since the ductwork cannot be cleared for removal by Radiation Safety until the ductwork has been exposed when the fume hood has been removed:
  o If a fume hood tests positive for radiological contamination, it will need to be decontaminated by a staff member who has completed UF’s Radiation Safety Short Course (RSSC) and is approved by the Radiation Safety Program to work with Radiological Materials.
  o Once decontamination has been completed, Radiation Safety will need to return to re-survey the fume hood. This process will be repeated until the fume hood can be cleared by Radiation Safety.
  o Once the fume hood has been removed, fume hood exhaust ductwork must be surveyed by Radiation Safety after the fume hood has been removed.
  o Exhaust ductwork that tests positive for radiological contamination **MUST** be disposed of through EH&S’s Chemical and Radiological Waste Disposal (352-392-8400). Arrangement **MUST** be made with this group before the ductwork is removed.
  o Exhaust ductwork that tests negative for radiological contamination can be treated as normal - washdown before removal and disposed as appropriate.