

# Boston College

Office of Environmental Health and Safety

## Facility Services – EH&S Focus for Construction & Renovation Projects

### Introduction

This factsheet will review matters to ensure that EH&S issues are addressed in a timely manner and applicable EH&S regulations and codes are followed as changes are made to Boston College facilities and operations. Some of the requirements and impacts will be made during the construction/renovation phase, others after the project is complete and new equipment/operations are installed.

At Boston College, good health and safety practices are everyone's responsibility. All members of the University community are to be thoroughly familiar with their safety and environmental responsibilities.

For major projects and mid-size projects the EH&S Office should be contacted for consultation. For major projects, including new buildings, acquisition of new property, etc. many codes and regulations apply on the federal, state and local level. To fully understand all applicable programs and how they relate to the specific project, EH&S should be notified and be a participant starting at the conceptual design phase until completion.

For mid-size projects, such as partial building renovation and remodeling, some EH&S codes and regulations may apply. Project managers should meet with EH&S, or provide a scope of work for EH&S review. EH&S can provide the project manager with any recommendations and or can serve on the project team.

For minor projects, and applicable maintenance work, project managers should meet with EH&S, or provide EH&S with a scope of work for review. EH&S will then provide the project manager with any recommendations to ensure the University meets its obligations.

### Applicable Regulations

Several regulatory agencies have rules that apply to construction activities. A thorough review of the project will need to be considered to determine applicable regulations and codes.

At the federal level this may include:

- Department of Transportation (DOT)
- Environmental Protection Agency (EPA)

- Occupational Safety and Health Administration (OSHA)

- Center for Disease Control (CDC)
- National Institutes of Health (NIH)
- Nuclear Regulatory Commission

At the state level this may include:

- Department of Environmental Protection (DEP)
- Department of Environmental Management (DEM)
- Department of Labor and Workforce Development (DLWD)
- Department of Public Health (DPH)
- Department of Public Safety (DPS)
- Executive Office of Environmental Affairs (EOEA)
- Fire Marshals Office
- Massachusetts Historical Commission
- Massachusetts Water Resource Authority (MWRA)

At the local level this may include:

- Fire Department
- Board of Health
- Institutional Biosafety Committee

### Summary of Requirements/Impacts

Construction and renovation projects vary widely. Below is a listing of some possible impacts that should be considered for each project.

1. Asbestos – determine presence, then removal or maintenance
2. Lead - determine presence, then removal or maintenance
3. Urea Formaldehyde - determine presence
4. Underground or aboveground storage tanks – either removal or installation
5. PCBs (ie. in transformers, switch gears, ballasts)
6. Installation/change of generators (ie. diesel, gas)
7. Installation of boilers or other emission generating equipment
8. Wastewater management (NPDES)
9. Disposal of light bulbs/tubes
10. Disposal of old equipment
11. Hazardous waste disposal
12. Disposal of old computer/electronic equipment
13. Noise generation (ie. during construction or for new equipment)
14. Air quality – outside and indoor
15. Sewer connections
16. Pest Control
17. Impact to drinking water
18. Impact to sanitary system

19. Impact to HVAC systems
20. Impact to fire protections systems
21. Impact to other building systems
22. Maintenance of exits and egress and other fire safety requirements in occupied buildings
23. Addition/disposal of freon or other refrigerants
24. Chemical usage & storage requirements (ie. OSHA's Hazard Communication/MSDSs, EPA's Title III, Risk Management Plan or Building Code)
25. Humidification systems
26. Presence of contaminated soil/water from previous releases at the site
27. Presence or creation of confined spaces in work area
28. New equipment requirements (ie. once-through water cooled system *not* allowed)
29. Laboratory Renovations
30. Update signs and labels used to identify hazards
31. Communication to occupants to outline potential use restrictions
32. Location of vending machines or other equipment that may block means of egress

## **Training**

Review of this Factsheet is recommended for personnel who are responsible for construction and renovation activities. Contact EH&S for case-by-case review of permitting applicability and assistance with specific permitting requirements

## **Reporting**

Reporting requirements will vary widely depending upon the project and its impacts. Examples of some applications/notifications to be filed are:

- Local Fire Department and DPS for UST installation
- Filing Construction or Demolition Notification (Form BWP AQ 06) with the DEP for air quality impacts
- Filing with DEP (BWP AQ 04), DLI, DPH and or BFD for asbestos or lead abatements. BWP AQ 06 might be a prerequisite, depending upon job details.
- File notification forms/impact reports with EOEA for major environmental impacts
- File with DEP for site clean-up activities
- Notification to MWRA for any change in sewer usage
- Change in BC's Clean Air Act Operating Permit with installation of new boilers, emergency generators, etc.
- File NPDES notification with EPA for construction projects over 5 acres (will be over 1 acre in 2003)
- Fire department and EH&S for welding/cutting/hot work

## **Recordkeeping**

Recordkeeping requirements will depend upon the program impacted. A review of the specific regulation is required for a full understanding. Some documentation must be kept during the construction phase; other records will need to be kept afterwards, for example for the life of the equipment or while emissions are occurring.

## **Written Program**

Some regulations require a written program to be kept on site. A review of the specific regulation is required and consultation with EH&S is recommended for a full understanding.

Existing written programs on site that might need to be amended include:

- Asbestos Management Program
- Confined Space Entry
- Lab Guide for Renovations, Remodels, Moves and Terminations
- Maintaining Indoor Air Quality During Construction & Renovation Projects
- Spill Prevention Control and Countermeasure Plan

Existing regulatory permits/licenses on file that might need to be amended include:

- Boston Fire Department – Storage of Flammable Liquids
- Mass Water Resource Authority – Sewerage Use
- Radioactive Material License

## **University Resources**

Office of Environmental Health and Safety, St. Clements Hall, 552-0308

October 24, 2000