

## Attachment A

### Applicable Laws and Regulations for the MC Instructional Laboratories

#### Question from Community:

*Please identify all applicable national, state and local requirements, and all non-binding guidelines, pertaining to siting and managing the chemistry and biology labs, and analyze in a report whether and how the location selected for the labs in a residential neighborhood complies with these requirements and non-binding guidelines*

#### Applicable National, State, and Local Requirements:

In addition to the Montgomery County building design and review process, the following are a list of building codes and standards that will govern the design of the new math and science building:

ICC INTERNATIONAL BUILDING CODE 2015 EDITION  
ICC INTERNATIONAL MECHANICAL CODE 2015 EDITION  
IGBC INTERNATIONAL GREEN BUILDING CODE 2015 EDITION  
NFPA 1 FIRE CODE, 2015 EDITION  
NFPA 13 STANDARDS FOR THE INSTALLATION OF SPRINKLER SYSTEMS, 2013 EDITION  
NFPA 14 STANDARDS FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEM, 2013 EDITION  
NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE, 2013 EDITION  
NFPA 20 STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION, 2013 EDITION  
NFPA 70 NATIONAL ELECTRICAL CODE, 2014 EDITION  
NFPA 101 LIFE SAFETY CODE, 2015 EDITION

#### Non-binding guidelines pertaining to siting and managing the chemistry and biology labs:

In addition to the above national, state, and local requirements, the college is committed to environmental health and safety as the college is committed to the safety of students, faculty, staff, and neighbors.

The College places a priority on safety and utilizes appropriate protocols. Established safety programs include:

- Classroom and office protocols
- Consistent materials hygiene and hazard communication
- Safety for facilities operations and maintenance activities

Montgomery College's Environmental Safety Office works to promote a healthy and safe work environment for all members of the College community and, as result, the communities in which the College operates.

The Environmental Safety Office requires safety training for faculty, staff, and students; provides employee access to Safety Data Sheets for chemical materials; oversees proper disposal of chemical

waste; investigates safety complaints; and supports preparation for environmental emergencies that may impact our campuses or our students. College materials are strictly regulated at all levels of government. The Environmental Safety Office administers and oversees compliance with federal and state environmental and occupational regulations. Key regulatory bodies are as follows:

- OSHA *Occupational Safety and Safety Administration*
- MOSH *Maryland Occupational Safety and Health*
- EPA *Environmental Protection Agency*
- MDE *Maryland Department of the Environment*
- WSSC *Washington Suburban Sanitary Commission*

The College Contracts with ECOFLO, Inc. for pickup of all chemical waste. ECOFLO is a waste management company that conforms to EPA, DOT, and state regulations.

**How the location selected for the labs in a residential neighborhood complies with the above requirements:**

Currently, the existing science buildings on the Takoma Park/Silver Spring Campus have the same programs as the new building. The new building systems would be a significant upgrade over the existing and would allow the programs to function in a new building that meets contemporary building code.

The proposed facility will be designed to meet all pertinent regulated codes and standards including all that govern the chemistry and biology labs. The specific details about how this project will respond to each individual code requirement is yet to be finalized, but the design team can assure that the program and scope as proposed can and will comply with all regulatory requirements. In fact, the College has a strong demonstrated record of safety. Labs have been present and safely operated on the Takoma Park/Silver Spring Campus for more than 50 years.

Regarding the new math and science building, the laboratories on campus are basic instructional labs similar to MCPS labs—no investigative research or commercial activities will occur. At least four MCPS high schools with comparable instructional labs are embedded in residential neighborhoods.

The College Uses Standard Instructional Lab Materials. Many are common household materials, including:

- Tylenol - *Acetaminophen*
- Ibuprofen- *2-(4-Isobutylphenyl) propanoic acid*
- Hexane - *Solvent used in glues and to extract cooking oils, e.g., soybean and canola*
- Helium gas - *Often used to inflate balloons at birthday parties*
- Vinegar - *Acetic acid*
- Starch
- Sugars - *Sucrose, Glucose*
- Ajax laundry detergent
- Phosphoric Acid - *(Found in sodas)*
- Salts - *(A variety of cationic and anionic compounds)*
- Weak to strong acids - *(HCL, found in your stomach)*

- Acetone - *Nail polish remover*

Such compliance with pertinent codes and standards, as a practical matter, are mandatory project requirements from all parties involved. Compliance is part of the Montgomery County design review process prior to construction of a project. Compliance with these applicable codes and standards is a requirement of Montgomery College as the owner and operator of a facility with many students and faculty. Compliance is a requirement of the design team's professional ethics as the design team is the architect and engineer of record.