



HARVARD
Campus Services

Environmental Health & Safety



Annual Report—FY19

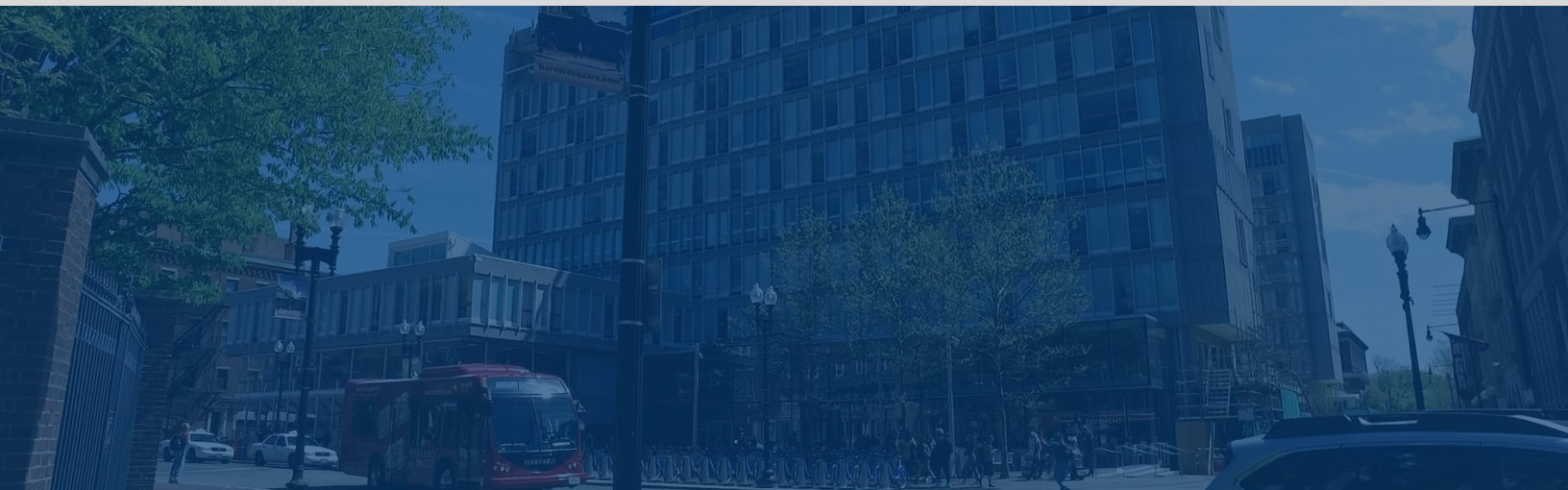


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A Message from the Managing Director



We are pleased to present to you our FY19 Environmental Health & Safety (EH&S) Annual Report.

EH&S engages schools and administrative units to provide collaborative oversight and support. From environmental, health, and safety issues to emergency management and business continuity, we're focused on developing practical solutions that meet the rapidly changing needs of our partners.

As a part of Campus Services, EH&S acts in the best interest of the University to provide stewardship, strategies, and services that provide schools and administrative units with local control so they can effectively execute their missions and be prepared for potential emergencies.

Inside this report you'll learn more about the scope and impact of Harvard's EH&S programs along with a number of noteworthy accomplishments throughout this past year. These accomplishments are only made possible by the strong partnerships we maintain across Harvard. The report highlights how together we can build and foster a safer, healthier, and more environmentally responsible University.

My sincere thanks for your continued support. We look forward to bringing more services online that help your operations including increased occupational medical support, more metrics, and more locally curated services. If you have any suggestions or need more information or support, please don't hesitate to contact me.

Best Regards,

Bill VanSchalkwyk
Managing Director

ENVIRONMENTAL
HEALTH & SAFETY

608
Food safety
inspections



1,086
Pest control
assists

150+
Building
safety
inspections



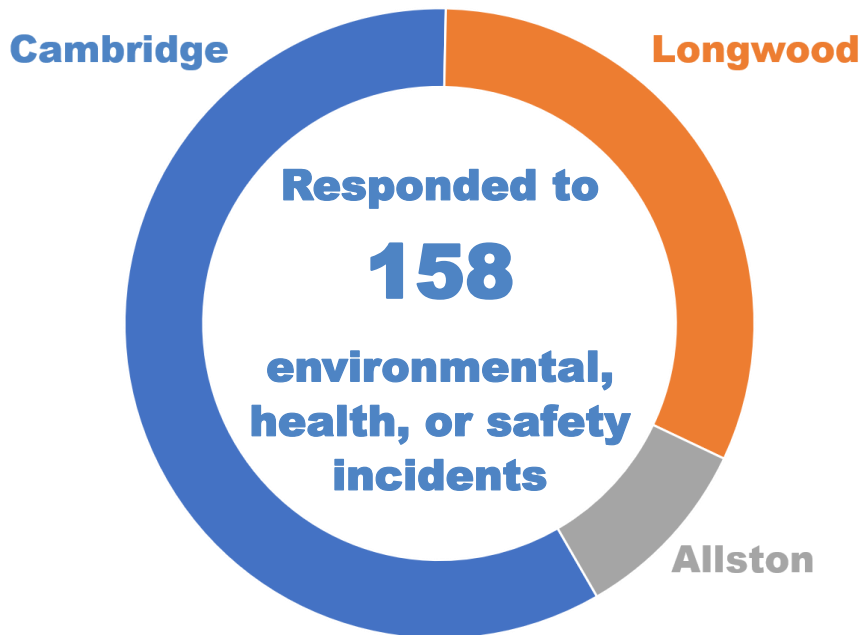
100+
Building
evacuation
drills

Managed
900+
Waste collection areas



366
General lab
inspections

Supported
95
shipments of hazardous
materials around the world



40
Machine shop inspections

21,651
EH&S online trainings completed



Uploaded
15
new or updated web-based trainings into the Harvard Training Portal

Maintained
128
compliance trainings

Supporting Students, Staff, & the Broader Community

Stretching and Flexing to Better Health

EH&S Occupational Safety partnered with Transportation Services, University Health Services, and Campus Services Human Resources to teach employees stretching and flexing techniques that can be used during their shifts to help prevent musculoskeletal injuries. These types of injuries are often suffered by employees who have to sit for long periods of time or those who engage in repetitive tasks that require lifting awkward and heavy loads. When Transportation Services requested this type of program, EH&S saw a big opportunity to create some guidelines that could be used across the University.

Learn more www.ehs.harvard.edu/programs/ergonomics.



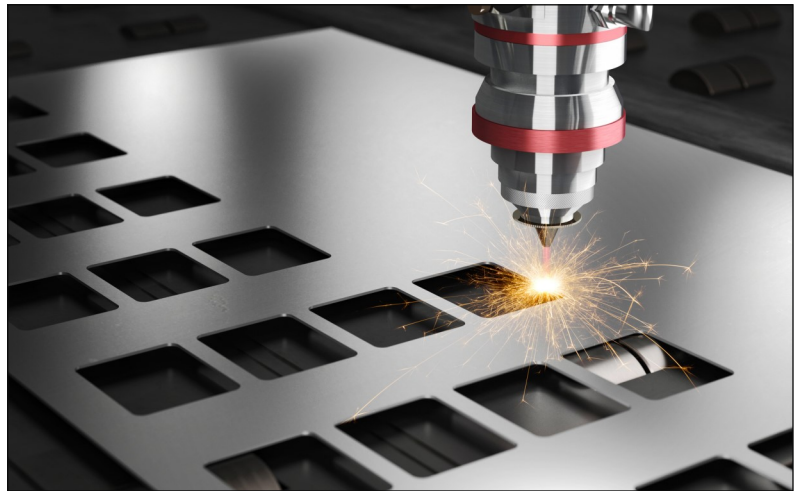
Supporting the Pollinators

A regular part of our Pest Control program is to review proposals to install and maintain honey beehives on our campuses, register the hives, and make sure that the proposed locations and activities are safe for both our community members and the bees. The image (bottom left) shows a bee care company tending to hives on a “green roof” at Harvard Business School. Each year, our Environmental Public Health (EPH) staff also respond to an array of pest issues on our campuses, and sometimes receive nervous calls about beneficial creatures as well. This swarm of bees at Lehman Hall (top left) in June was one such example, and the impressive, seasonal aggregation was a natural part of bee behavior. It understandably caused some concern but lasted for just part of a day. The bees are actually at their most docile during swarming but EPH closed off the area and re-routed pedestrian traffic until the swarm moved along.

Making Makerspaces Safe

Makerspaces are becoming more common across the University. These are spaces designed and dedicated to hands-on creativity and often feature 3D printers and laser cutters, along with more traditional techniques such as soldering and machining.

Given their popularity, EH&S has teamed up with a cross-section of machine shop managers and researchers to carefully review and develop processes, safe work procedures, and control devices that minimize the risk of exposure. EH&S has developed technical fact sheets and a dedicated [Makerspace Safety webpage](#) for University personnel. Plus, EH&S recently launched a new online Machine Shop and Makerspace interactive safety training in the [Harvard Training Portal](#).



Emergency Management

Harvard Emergency Management provides communication and resource coordination for Harvard's emergency response teams during incidents. Some of our efforts over the past year included:

- Leading severe weather monitoring for winter storms
- Coordinating response efforts for mumps cases in the Harvard community
- Providing assistance to Harvard affiliates displaced due to building fires

Support for special events included:

- Harvard/Yale Football at Fenway Park
- Yard Fest
- Commencement

Our role is to help coordinate the resources you need to keep your communities safe, while allowing you to focus on executing your emergency and continuity plans. We're a resource for schools and departments and we're here to connect you to the appropriate people and groups at the University during a crisis.

Creating a Safer & Healthier Campus Environment

Harvard's Priceless Resources Can Present Unique Challenges

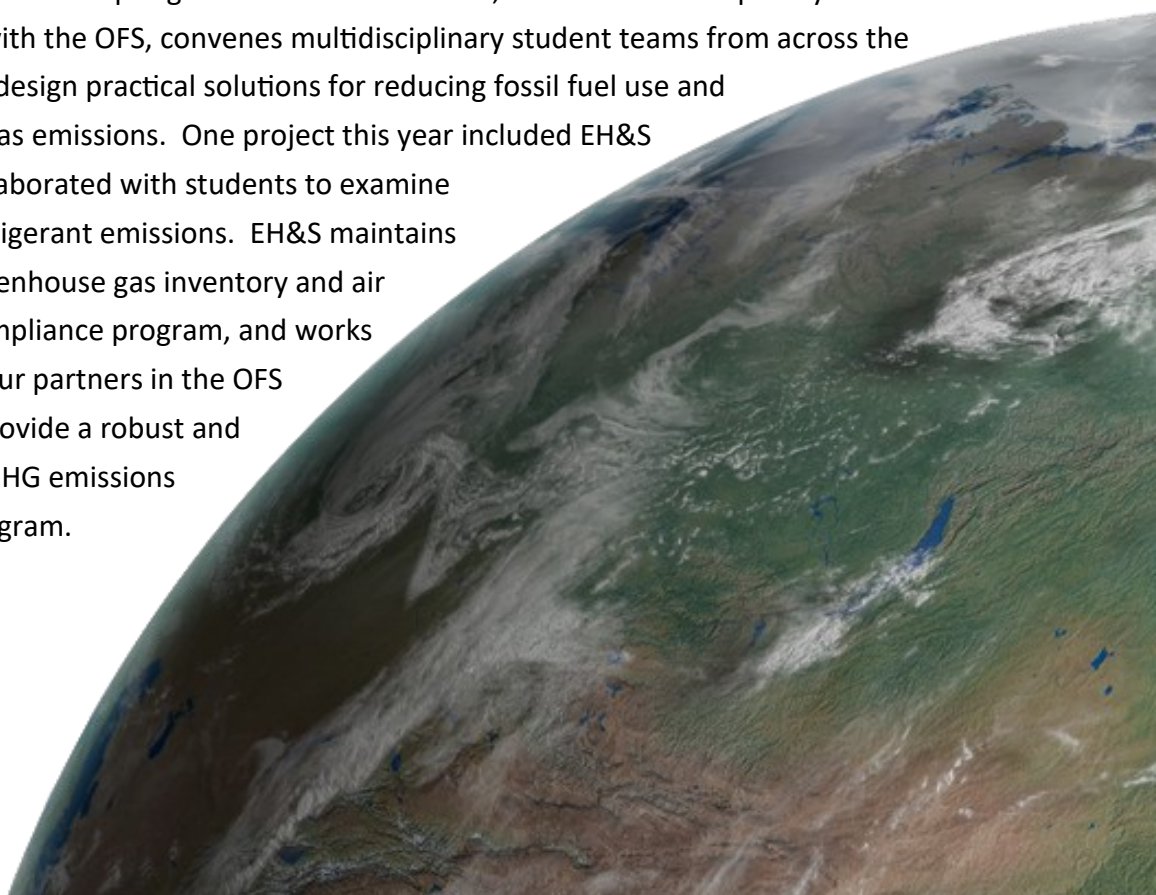
Harvard Library is composed of libraries from across the University. It's the oldest library system in the United States, and the largest private and academic library in the world. Many of the materials housed in the system have been exposed to mold, insects, and even chemicals used in preservation. To mitigate risks that may arise from these substances, the EH&S Facilities Life Safety team partnered with Harvard Library by serving as co-chair of the Harvard Library Contaminated Collections Task Group. Through this, we discovered, identified, and assessed hazards that may be posed to library employees and patrons. After months of investigative work and interviews with dozens of stakeholders, the group is now developing new library-specific safety trainings. In addition, the group recently launched a new online [conservation lab safety fact sheet](#).



We Are a Living Lab

To Reduce Emissions, Collaboration is Key

Environmental Health and Safety (EH&S), Energy and Facilities (E&F), and The Office for Sustainability (OFS) were well represented at Harvard Law School's (HLS) Climate Solutions Living Lab course last spring. The interactive course, which was developed by HLS in partnership with the OFS, convenes multidisciplinary student teams from across the University to design practical solutions for reducing fossil fuel use and greenhouse gas emissions. One project this year included EH&S staff who collaborated with students to examine Harvard's refrigerant emissions. EH&S maintains Harvard's greenhouse gas inventory and air emissions compliance program, and works closely with our partners in the OFS and E&F to provide a robust and transparent GHG emissions inventory program.



Creating a Safer & Healthier Campus Environment

Multi-year Remediation Achieves Positive Results

This past March, a longstanding remediation project near Northwest Corner was completed. In 2006, due to a previous owner's waste handling practices, decades old dry-cleaning solvent was found during soil and groundwater testing for the construction of the Wasserstein Hall, Caspersen Student Center, Clinical Wing (WCC) building. Since then, EH&S Project Support Services led the remediation effort that included bio-remediation using naturally occurring bacteria, groundwater capture, treatment and reinjection, and soil gas capture and treatment. The success of this project can be attributed to a team comprised of people from Harvard Law School, Office of the General Counsel, Harvard Public Affairs and Communications, Central Administration, Parking Services, Engineering and Utilities, and many others who worked diligently toward meeting our remediation goals. The remediation was so successful that Activity and Use Limitations on the property were not required.

Leading the Way on Climate

At the Climate Leadership Conference in Baltimore last March, Harvard University received the Climate Leadership Award for Excellence in Greenhouse Gas Management (Goal-Setting Certificate). The award recognizes the University's ambitious 2nd generation climate goals to be Fossil Fuel-Neutral by 2026 and Fossil Fuel-Free by 2050.

Employees from the Office for Sustainability and Environmental Health & Safety attended the conference and dinner, and accepted the award on behalf of Harvard.

Enhancing Safety in Labs & Research

Creating Safer Labs & Lowering Energy Costs

Laboratories are becoming safer and more energy efficient because of an Eversource and Harvard funded grant. EH&S and the Office for Sustainability, along with FAS, SEAS, and Harvard Capital Projects, recently completed the Lab Inhalation Risk Assessment (LIRA) study which yielded an estimated annual energy savings of \$51,000 in the Sherman Fairchild laboratory. This was achieved by right-sizing laboratory ventilation to the needs of the research. It also identified opportunities for improving safety through better exposure control ventilation directly at potential emission sources. The findings will serve as building blocks to developing an interactive Lab Ventilation Management Program for the Allston Science and Engineering Complex and beyond.

Guidelines & Training

New Lab Safety Guidelines

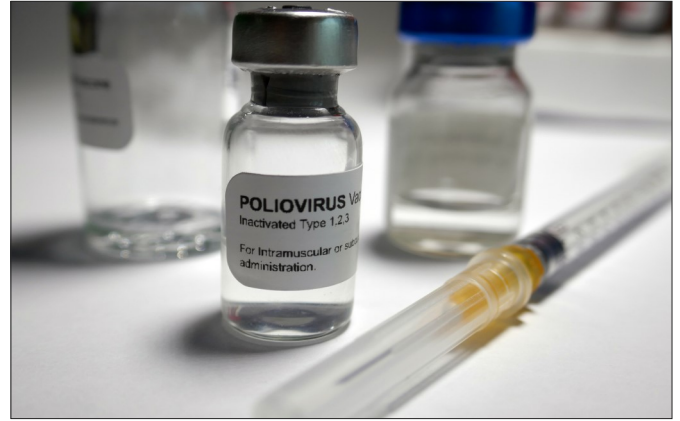
The Laboratory Safety group recently conducted a thorough evaluation of the chemical safety guidance documents that have been developed over the years. As a result, [newly revised Lab Safety Guidelines](#) are now posted on the EH&S website and are available to researchers as they incorporate safety information into their standard operating procedures. EH&S will continue to develop and add guidance documents, as appropriate and upon request, for common hazardous chemicals and processes.

Securing Research Facilities

It's critical for researchers to have continuous access to the facilities in which they work. The EH&S Radiation Safety team works closely with Harvard Human Resources, Harvard University Police Department, and local law enforcement to keep radiation facilities secure, operational, and accessible to authorized users. This past year, Radiation Safety instituted an online training that helps researchers meet the safety and security requirements necessary to maintain uninterrupted access. In addition, physical access control systems have been upgraded to ensure the facilities remain secure.

Supporting the World-wide Effort to Eradicate Polio

This year, the EH&S Biosafety team devised a strategy to distribute a survey from the Centers for Disease Control to any faculty or staff that might be in possession of poliovirus or materials potentially contaminated with poliovirus. This included a wide-variety of laboratories and other sample repositories across the University. By identifying these samples now, Harvard can help prepare for a future where poliovirus is eradicated in the wild and ensure that these samples pose no future risk.



eShip Global Takes Off

Successful research requires collaboration on a global level. This is especially true when coordinating and executing shipments of hazardous materials, research equipment, and prototypes around the world. Based on feedback from a shipper's survey, EH&S and the Export Control Council collaborated to pilot a uniform shipping portal, eShipGlobal. This helps researchers save time and money, ensures on-time delivery and safety when shipping hazardous materials, and supports compliance with Dangerous Goods and Export Control regulations.





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