

**Purdue University
Lyles School of Civil and
Construction Engineering**

Safety

Environmental Health and Safety Compliance (I.2.4) issued May 1, 2011

- Faculty, staff, students are required to comply with environmental, health, safety and preparedness laws and regulations issued by federal, state and local agencies
 - Occupational Safety and Health Administration
 - Nuclear Regulatory Commission
 - Environmental Protection Agency
 - Department of Homeland Security
 - Department of Transportation
 - Indiana Department of Environmental Management
 - Indiana State Department of Health
- Faculty, staff and students also must comply with related university policies, procedures and instructions.

Rights

Job Safety and Health It's the law!



EMPLOYEES:

- You have the right to notify your employer or OSHA about workplace hazards. You may ask OSHA to keep your name confidential.
- You have the right to request an OSHA inspection if you believe that there are unsafe and unhealthful conditions in your workplace. You or your representative may participate in that inspection.
- You can file a complaint with OSHA within 30 days of retaliation or discrimination by your employer for making safety and health complaints or for exercising your rights under the OSH Act.
- You have the right to see OSHA citations issued to your employer. Your employer must post the citations at or near the place of the alleged violations.
- Your employer must correct workplace hazards by the date indicated on the citation and must certify that these hazards have been reduced or eliminated.
- You have the right to copies of your medical records and records of your exposures to toxic and harmful substances or conditions.
- Your employer must post this notice in your workplace.
- You must comply with all occupational safety and health standards issued under the OSH Act that apply to your own actions and conduct on the job.

EMPLOYERS:

- You must furnish your employees a place of employment free from recognized hazards.
- You must comply with the occupational safety and health standards issued under the OSH Act.

This free poster available from OSHA –
The Best Resource for Safety and Health



Free assistance in identifying and correcting hazards or complying with standards is available to employers, without citation or penalty, through OSHA-supported consultation programs in each state.

1-800-321-OSHA
www.osha.gov

OSHA 3100-12-00R

- To be informed about known health and safety hazards in your area
- To be trained to use proper safety procedures
- To inform your supervisor or safety representative about accidents or hazardous situations in your work area without fear of repercussions

Responsibilities

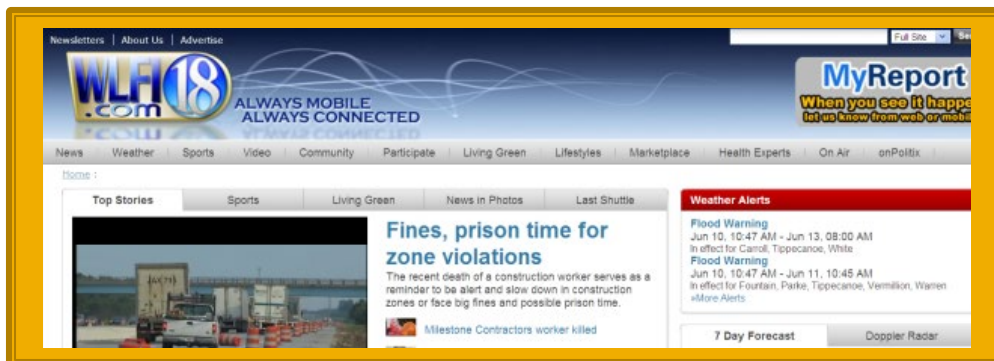
- Use the available information and to stay informed about health and safety hazards in your area
- Attend the training provided
- Use proper safety procedures

Safety Training

- Safety training varies for each lab
 - Environmental, Geotechnical, Geomatics, Architectural, Materials, Hydraulics and Structures
 - Bowen has its own safety program
 - Transportation: Anyone funded by Joint Transportation Research Program (JTRP) must complete the JTRP safety training
- Each lab has its own hazards and safety protocol
- You must complete safety training and sign an HCP-8 for every lab in which you work

Emergency

- Campus wide emergency
- Local news
 - WLFI
 - Journal & Courier
 - Radio: WBAA 920 AM, 101.3 FM



Emergency – Alertus System



Emergency Door Locks



Campus Emergency Phones



On Campus Emergency

- Cell phones
 - Sign up for emergency text message for your cell phone
 - <http://www.purdue.edu/securepurdue>



Emergency Evacuation

- In case of fire or other emergency situations you need to know how to safely exit the building



- If you are a professor or teaching assistant, it is your responsibility to ensure that your students are safely evacuated.
- Emergency procedure for chemical spill or localized safety issue:
 - Leave the area, contact your supervisor, call 911

Emergency Evacuation

- Call 911
- Leave the building
 - First stop experiments, as warranted (heat, water, cooling, or potentially dangerous if not attended)
- Leave the office doors open
- Exit using the stairs (not the elevator!)
- Go to the emergency assembly area (EAA)
 - Between Pharmacy and HAMP (or atrium of Armstrong in inclement weather)



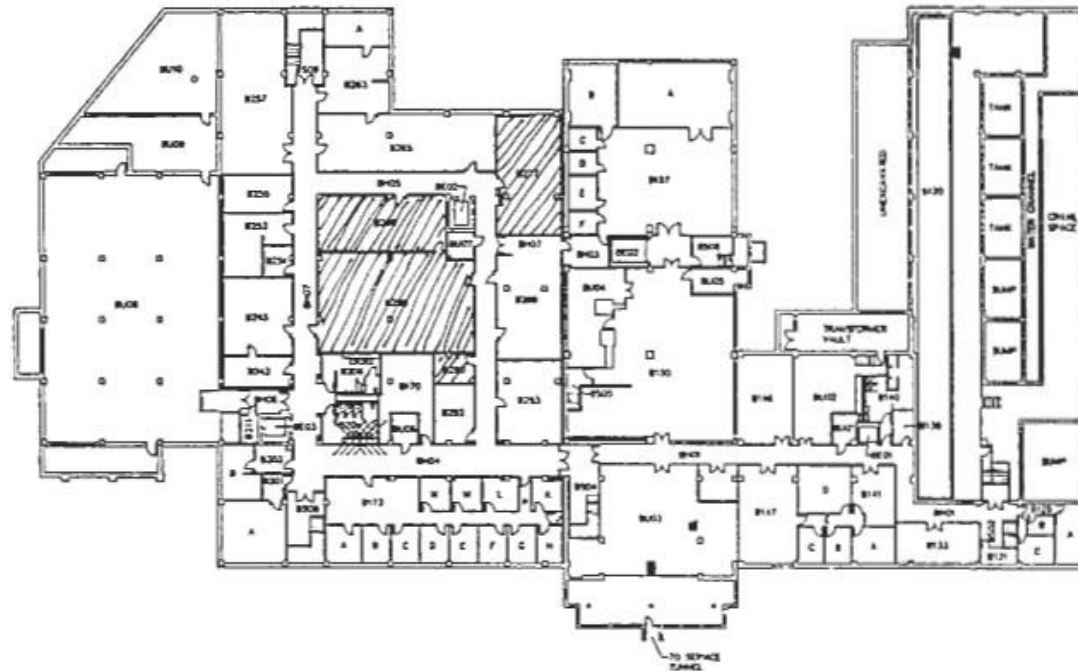
Emergency Assembly Areas

Weather Emergency

- Tornado
 - There are 9 tornado sirens on campus
 - If you hear the siren, go to a designated safe location
 - The basement of HAMP Engineering is a designated safe location



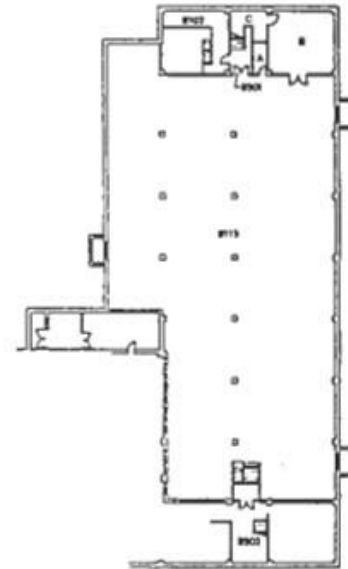
Tornado – Shelter in Place



BASEMENT FLOOR PLAN

CIVIL ENGINEERING BLDG.

SCALE: 1/16"=1'-0"
SHEET 1 OF 7
PAGE 84
CODE 50



HYDRAULIC RESEARCH LAB FLOOR PLAN

Evacuation plans for all rooms are available on-line

General Lab Protocol

- Be aware of lab hazards, do not use equipment or chemicals unless you have been trained
 - Equipment training
 - Chemical training
 - Refer to hazard assessment for specific PPE
- Wear appropriate clothing
 - Long pants, shoes, hair tied back, etc.
- Wear appropriate personal protection equipment (PPE) for the task you are doing
 - Goggles, gloves, hearing protection, respiratory protection, etc.
- No eating or drinking in labs



Potential Hazards

- Biohazards, biowastes
- Equipment and lasers
 - Do not use without training and authorization of safety contact in lab (DTI)
- Chemicals (consider transport, too)
 - Understand and refer to SDS for all chemicals you use
 - EHS will collect chemical waste
- Electricity
- Heat



Safety: Be Proactive

- Keep your lab organized and put things away
- Locate emergency safety equipment before you need it
 - Fire extinguishers, eyewash stations, safety showers
 - SDS records, safety procedures
- Notify safety contact (DTI) of any incident
 - Reporting your “near miss” may protect you in the future and may save someone else from an accident or injury
- Discuss any safety concerns you have
 - Talk to your DTI, your professor, REM or a member of the safety committee if you have concerns



Personal Protection Equipment

- Safety goggles
- Lab coat
- Face mask
- Gloves
- Long pants
- Shoes
- Safety harness
- Hearing protection
- Hard hat
- Safety vest
- OSHA certified ladder
- Respirator
- Fume hood



Important: Take contaminated gloves off before exiting the lab!

Safety First

■ Potential obstacles to safety

- Time pressure
- Lack of knowledge
- Carelessness and fatigue



■ To increase safety

- Develop and follow protocols
- Make safety a consideration in all plans and procedures
- Don't be afraid to voice concerns regarding safety



HEALTH	2
FLAMMABILITY	1
REACTIVITY	3
PERSONAL PROTECTION	B / n

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FLAMMABILITY	1
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Emergency

- For any kind of emergency
- Call 911 from any university phone
 - 24 hours a day, 7 days a week

9-1-1



Emergency and Injury

- Call 911 for medical emergency
 - Defibrillator on the first floor by room 1149
- For workplace injury
 - Fill out EHS form as soon as possible

<http://www.purdue.edu/rem/injury/froi.htm>



Civil Engineering

HazCom/Right to Know Summary

- HazCom/Right to Know, you have a right:
 - To know the hazards that you work
 - To receive appropriate training
 - To voice your concerns without negative repercussions
- A chemical inventory exists for each lab and shared work areas and is maintained by the DTI (designated trained individual) for that area
- All chemicals must have an SDS which provides information about the safe use of the chemical
- Emergency procedure for chemical spill or safety issue
 - Leave the area, contact your supervisor, call 911



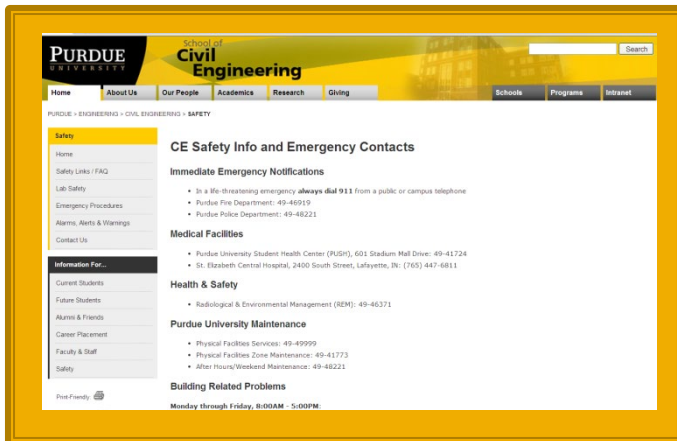
Safety Resources

- Environmental Health and Safety (formerly known as REM) is Purdue's safety consultant

- <http://www.purdue.edu/ehps/rem/>

Civil Engineering

- [Safety website](#)
- [Online training](#)



Graduate Seating

If you are assigned a seat in a graduate office, you will be expected to maintain a clean space.

Do not leave food laying around the office, this can attract mice and bugs.

Keep your personal belongings to a minimum so you are not crowding others and creating clutter.

All seats are assigned. Do not move from your assigned desk without permission.

If there is a vacant desk in the office, do not put anything on the desk without permission. This includes microwaves, refrigerators, coffee pots, etc.

When your time to graduate arrives, please remove all your contents. Any items left behind, will be thrown away. Return your keys to the main office.

Safe Walk Program

- Purdue Safe Walk Program. 494-SAFE (7233). Service is offered 24 hours a day, seven days a week.