
Subject: CAUS Safety Procedure for Build Projects Policy:

The College of Architecture and Urban Studies (CAUS) and Virginia Tech (VT) are dedicated to providing a safe and healthy living, learning and working environment for faculty, staff and students which complies with Occupational Safety and Health Administration (OSHA) and Virginia Tech Environmental Health and Safety (EHS) regulations, policies and programs. There are inherent safety risks with construction and building-related tasks, and it is everyone's responsibility that these risks are mitigated throughout the project life by following established best practices and being properly trained for the specific project. This policy applies to all build projects inside or outside the United States. This policy will activate if your build project has one or more of the following hazards; fall protection, energized electrical, confined space, overhead construction, chemical and hot work.

Several steps will need to be followed prior to the start of a build project (on-campus and off-campus, inside and outside the United States):

Step 1- Training/Safety Assessment:

Prior to any build project the CAUS Safety Coordinator and/or the EHS Occupational Safety Engineer will meet with the responsible faculty/staff party (e.g. Principal Investigator (PI) or project leader) to complete an ESH Hazard Assessment Form (see below) to identify existing and potential hazards, engineering and administrative controls to be implemented and/or required Personal Protective Equipment (PPE) for the project. Appropriate EHS training will be identified through the Hazard Assessment process for a given project.

It is recommended the PI or Project Leader preview the Hazard Assessment (HA) form prior to the hazardous assessment meeting. This is helpful for two reasons; 1) familiarity with the hazards on which CAUS and EHS are focusing, and 2) an opportunity to eliminate or mitigate potential risks prior to the official Hazard Assessment meeting.

The form can be found at:

http://ehss.vt.edu >> Documents (left menu) >> in search box at top of page, enter: **Hazard Assessment**. The form needed is under the "Personal Protective Equipment" category., or the URL: **http://www.ehss.vt.edu/detail_pages/document_list.php?s_document_title=hazard+assessment**

If the responsible faculty/staff are uncertain whether the project is large enough, long enough, or hazardous enough to fall under this policy, it is their responsibility to consult with the CAUS Safety Coordinator before beginning work. All required training will be conducted through established EHS courses and must be completed prior to beginning of construction. Required training will be setup and recorded in the VT EHS Safety Management System (SMS) at the site **http://ehss.vt.edu**. The SMS portal will be setup by the PI and the Safety Coordinator. It is the PI's responsibility to ensure all participants complete their required training prior to construction and monitor participants during construction to ensure safety compliance. Training on using the SMS will be provided, if needed.

The PI will be issued an Emergency Contact card by the CAUS Safety Coordinator, which will have call tree numbers and procedural information in the event of a medical emergency or accident.

Step 2- OSHA's "Hierarchy of Controls":

Project hazards should always be reviewed and assessed throughout the project life. Addressing these hazards can be broken down into three areas, from most effective to least effective:

1. **Elimination/Engineering Controls**- The hazard is removed from the workplace or a barrier is used to eliminate worker exposure to the hazard. This method should always be considered first and implemented where feasible.

2. **Administrative Controls**- Requires that you change procedures, place signage, or take other steps to change the way people work. The hazard and/or employee exposure is reduced to a safer level, but still may require the use of Personal Protective Equipment (PPE). Scaffolding must be approved and tagged by a scaffold "competent person" (i.e., trained supervisor/PI, EHS, CAUS Safety Coordinator).

3. **PPE**- It is paramount that all PPE is used properly to protect against hazards. PPE does not affect the hazard, it only minimizes the extent of the injury. If a Personal Fall Arrest System (PFAS) must be used (i.e., work at 4+ feet) it shall be approved/inspected by a "PFAS competent person" (i.e., trained supervisor/PI, EHS, or the CAUS Safety Coordinator). Scaffolding must be approved and tagged by a scaffold "competent person" (i.e., trained supervisor/PI, EHS, CAUS Safety Coordinator).

Step 3- Documentation:

A Safety Binder will be created and kept at the build site. The binder will contain the following:
1. Completed Hazard Assessment form
2. Completed Hazard Communication Plan
3. Any completed safety inspections by CAUS Safety Coordinator and/or VT EHS
4. Any required logs/tags (ex. Scaffolds and excavations)
5. Copy of cards of FA/CPR trained personnel (at least one trained person on-site during construction activities)
6. List of emergency contacts and procedural information for medical emergencies, accidents, and OSHA investigation procedures will be visibly posted on site during construction.

Step 4- Inspections:

The site will be inspected periodically during the construction process by the CAUS Safety Coordinator and/or the EHS Occupational Engineer. Any high risk deficiency found will need to be addressed immediately. Depending on the deficiency, the CAUS Safety Coordinator and EHS have the express authority to shut down job site or curtail construction until the deficiency is corrected.

Any person on the site working without proper PPE or working in an unsafe manner will be asked to stop work and correct the problem. The PI will be notified. If the same person is cited a second time for the same violation(s) they will be asked to leave the site and be counseled by the CAUS Safety Coordinator. Retraining may be necessary. A third violation will be grounds for permanent removal from site. Situations that are immediately dangerous to life and health, or pose a serious danger to self or others, are grounds for immediate and permanent removal from site.

Step 5- Responsibilities:

It is the responsibility of the Principal Investigator (PI) or Project Leader to monitor and ensure safety compliance throughout the life of the build project. The PI, at their discretion, can delegate these duties to a responsible, knowledgeable student worker when not on site. When such duties are delegated the student will be designated the Project Safety Officer (PSO). The CAUS Safety Coordinator shall be provided the name and contact information of the PSO. The PSO shall have completed all required training for the project and any additional training as determined by the scope of the work and/or hazards anticipated.

Safety is everyone's responsibility (re: Virginia Tech Health and Safety Policy #1005 and University Safety and Security Policy #5615), however, the higher responsibility for build project safety ultimately lies with the PI or the employee supervising the build.

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