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Project planning, work control, and research execution at CAES follows a multi-step process: project proposal; work planning and safety envelope development; and research execution, feedback, and closeout.

The CAES process will utilize a graded approach for approval of all work conducted at the CAES facility. In this approach, greater attention will be given to requests that represent greater hazards. For example, the assignment of a short-term project that requires the use of non-laboratory space for routine office activities could be simple, whereas a multi-year project using hazardous agents or novel processes would require greater scrutiny to ensure that the associated hazards can be adequately managed.

The Principal Investigator (PI) will work with the CAES Research Laboratory Manager (RLM) and the CAES Safety Officer (CSO) to prepare documentation with an appropriate outline of the project and an overview of the hazards involved. The CAES Executive Board (EB) reviews and approves the work at CAES for mission alignment and overarching facility envelope.

The laboratory space assignments, along with work control and safety envelope preparation, are supported by the RLM, CSO, Laboratory Leads (LL), scope.

These individuals make up the CAES Safety Committee, which approves the work control and safety envelope for the project and its location within CAES

The research execution, feedback and closeout are overseen by the PI, RLM, CSO, and LL. This is expected to be a collaborative effort to refine research methods and ensure research at CAES is conducted with researcher safety as the highest priority. Feedback is necessary in order to confirm the work hazards have been sufficiently identified and the safety envelope instituted for the project has not changed during the research execution process. At the conclusion of the project, the PI is expected to perform a closeout process. This process identifies the disposition of equipment installed, whether it will be removed from CAES, or if additional research may benefit from the

The PI must plan work in accordance with existing home institution policies, procedures, and requirements, while at the same time meeting any additional CAES requirements. In the event that an investigator is denied CAES occupancy following good faith efforts to resolve any issues with the CAES Safety Committee, the investigator may appeal the decision to the CAES Director. In addition, projects and/or investigators removed from the building for failure to adhere to building requirements may appeal the decision to the CAES Director for an ad hoc review and reconsideration.

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| 5 | Focused Review Initiator: CSO or RLM Approver: PI, Lab Lead, CSO, RLM | The CAESCSO or RLM will present the approved Project Proposal (CAES-047) and the completed Work Plan (CAES-048) forms for consideration and deliberation by the CAES Safety Committee during a focused review. The committee composition will be based on the type of project and hazards associated with the proposed scope of work. The Safety Committee will address concerns related to space, safety, and facility infrastructure to determine if CAES can support the project and provide feedback to the Pl on the type of planning required, and the level of rigor needed to plan and execute the proposed project work scope. The CAES Safety Committee will make every effort to process the form in a timely manner. However, for complex projects, the CAES Safety Committee may request input from subject matter experts as well as a presentation from the Pl. It is within the roles and responsibilities of the CAES Safety Committee to deny access due to limited resources. |
|----|---|--|
| 6 | Prepare for Readiness Review Initiator: Pl Approver: CSO | This includes installing the project equipment, assembling any apparatus, and preparing to start research following the Readiness Review. |
| 6a | Readiness Review Initiator: Pl and CSO Approver: Lab Lead, CSO, RLM | Before project startup, the PI and the project review team will complete activities needed to finalize project readiness (e.g., final walk down), personnel (e.g., training) and equipment (e.g., installation and passive testing). Approval to start work is granted by the CSO when the Readiness Review is completed. If the check identifies any pre- PI to resolve all pre-start items before starting work. CSO, RLM, and Lab Lead perform Readiness Review per CAES-003 Readiness Check. The content of the review, level of rigor, and participants will be tailored to the project. The review consists of an informal presentation of experimentation to selected Safety Committee members, at a minimum the PI, Lab Lead, designated SMEs, CSO, and RLM. NOTE More than one readiness review may be required prior to approval. |

| Conduct Research, Feedback, and Closeout | | | | |
|--|--|--|--|--|
| 7 | Update Laboratory Manual Initiator: Pl and | A Laboratory Manual is maintained in each laboratory or other research space. A current copy of your Work Plan and appendices will be placed in the Laboratory Manual and updated each time changes are made to the project. | | |
| | CSO | In consultation with the CSO, the project PI must manage configuration of project documentation. Additionally, CAES occupants are expected to communicate information about their projects by participating in building and other seminar series, information exchanges, meet and greets, and other community-building and collaboration-promoting activities. | | |
| 8 | Conduct Research | Project is approved to start work. | | |
| | | Approved Projects/ Programs must move into CAES within 60 days of approval (unless there are extenuating circumstances that are | | |

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11Safety CommitteeThe CAES Safety Committee will meet regularly and provide a forum for crosscutting
safety-related issues. The responsibilities of this committee include making decisions
on changes to CAES Environment, Safety and Health and operations processes,
sharing and distributing lessons learned, and providing a forum for CAES occupants



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