

Engineering Standards Update

News from Engineering Standards Program

Dec. 5, 2023

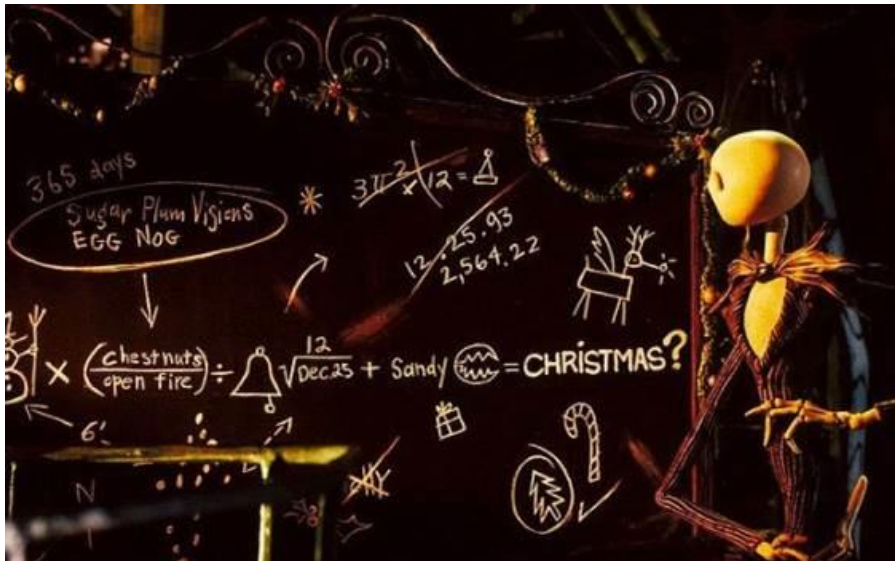


[Standards are serious business](#) but this newsletter isn't always.

Topics this month:

- Engineers Week Call for presentation and poster ideas
- Training & Qualification
- LANL Engineering Standards Issued in November
- National Standards Action
- DOE Technical Standards Action
- MSS Document Action
- When Good Conduct of Engineering Isn't Followed

Wishing you and your family a Merry Christmas and other Happy Holidays!



Just to note that Hanukkah starts the 7th; [Festivus](#) is the 23rd, Kwanza the 26th, and NYE (aka Amateur Night) Dec 31 (123123 if your slash key is missing).

ENGINEERS WEEK: CALL FOR PRESENTATION AND POSTER IDEAS

Submission titles due Dec.15

Do you have a presentation or poster idea to share during the Lab's celebration of Engineers Week, **Feb. 21-22**?

Employees, students and postdoctoral researchers from all engineering organizations are invited to send the title of their submission by Friday, **Dec. 15**. Presentations on R&D programmatic and operations-based projects are welcome.

This is a great opportunity to hone your presentation and poster skills, as well as share your knowledge and accomplishments with the Lab. snip

More information [here](#).

TRAINING & QUALIFICATION

Courses, Seminars, Programs

CoE Safety Basis Overview for Engineers #39564 - Jan 30, 8.30 - 10.30 am, Teams

If you have this course in your training plan, or just want to learn about safety basis for 2 hours, then you can take this course taught by Heath McLaughlin.

CoE Building Systems - ASME B31.9, #56239, 12/11 thru 12/18, 2:00-3:30

For selected managers: Conduct of Training, #17456, 12/13/2023, 10:00-12:00

Onboarding Training Courses by CoE Office, Teams

1. CoE ES Onboarding: Job Functions of Roles #54860, Thurs, Dec 7 11.30 am – 12:00 pm, Mon 12/11 11-11:30; Tr 12/14 11-11:30
2. CoE: Engineering Services Initial Onboarding Training #54864, Thurs, Dec 14, 1 - 1.30 pm
3. ES Onboarding: AP Introduction and Common APs Deep Dive #54871, Tues, Dec 19, 1 - 3 pm.
4. COE ES LANL Organization and Engineering Divisions Introduction, #54659, Wed Dec 6, 10:30-1130; Wed 12/13, 10:30-11:30; Wed 12/20, 10:30-11
5. COE Configuration Management Overview, #55231, Thurs Dec 7, 9:30-10:30; Thurs 12/21, 9:00-10:00

T&Q Admin matters

E-mail for CoE Training: es-do-tng@lanl.gov

Click e-mail address above for help with COE training issues like getting registered, missing credit, etc. Goes to the whole team: Stan Hayes, Nick Jones, Sadonna Tapia, Santana Quintana, and Chris Martinez. Alternatively, visit the Engineering Services Training and Qualifications webpage by clicking the button "[Email The Training Team](#)". The Training and Qualifications webpage contains information and tools on training requirements and copies of the various Qualification Standards maintained by the COE office.

E-mail for CoE Qual Program: COEQuals@lanl.gov

Click e-mail address above for any help with COE quals such as CSE, PrE, Design, Project, PSO, FDAR, and other qualified positions (and also SHR matters for CSEs). Goes to Deb Cushner, Jess Blea, and Barb Dela Cruz.

Instructor-Led Course Request/Registration Guide

For live courses without a session in UTrain, there's a [step-by-step guide](#) posted to the CoE T&Q "Resources" page.



LANL ENGINEERING STANDARDS ISSUED IN NOVEMBER

No updates this month.

Notable, however, are two Prime Contract mods that have now processed, incorporating two order revisions into the contract's [Appendix B](#), namely:

[DOE O 413.3B, Chg 7 \(LtdChg\)](#), Program and Project Management for the Acquisition of Capital Assets, and

[DOE O 436.1A, Attachment 1 CRD](#), Departmental Sustainability

Based on the implementation documents for the mods, these revised orders are being incorporated in CoE documents. The greatest impact is to [ESM Ch. 14, Sustainable Design](#). The chapter already implements the major order mandates and a revision just weeks away will refine that to fully align and implement in the LANL setting (For more on this, read "[Los Alamos is known for leading the way: Let's do the same with net zero / A roadmap for meeting and exceeding climate-friendly goals](#)").

LANL Engineering Standards Admin matters

E-mail for COE Eng Stds: engstandards@lanl.gov

Click e-mail address above for any general questions. Goes to the whole team: Tobin Oruch, Alan Yaeger, Neha Gidwani and Christina Salazar-Barnes. Alternatively, visit the [CoE](#) or [Engineering Standards](#) webpage and click on the email under the Engineering Standards team. Of course, if your need is discipline-specific, then it's best to contact the Standards POC for the corresponding ESM chapter shown on that [webpage](#).



NATIONAL STANDARDS ACTION

[Online National Codes & Standards](#) (Accuris Eng Workbench [EWB])

NOTE: **Information Handling Services (IHS)**, that some years ago became IHS Markit and in 2022 merged with S&P Global Engineering Solutions, **has now been rebranded as Accuris**. Regardless, the codes and standards are still in the same place and from the service called Engineering Workbench.

AISC 325, Steel Construction Manual, 16th Ed. (2023)

We don't get AISC via EWB since most standards are free downloads from

<https://www.aisc.org/publications/steel-standards/>. The manual has to be purchased if needed:

<https://www.aisc.org/publications/steel-construction-manual-resources/16th-ed-steel-construction-manual/>

ASME A13.1, Scheme for the Identification of Piping Systems

Publication Date: 10/25/2023

Type of Change: Complete Revision

ASTM A450/A450M, Standard Specification for General Requirements for Carbon and Low Alloy Steel Tubes

Publication Date: 11/1/2023

Type of Change: Complete Revision

NFPA 13, Standard for the Installation of Sprinkler Systems

A number of amendments (NFPA calls these TIAs, Workbench uses AMDs) with various published dates were posted. Since NFPA is the one org that forces read-only browsing (no pdf downloading), users should see and follow the AMDs when they access the std since that is the intent of NFPA and ESM Ch. 1 Z10.

Also, a number of errata (error notices) were posted and should be used.

At LANL, new projects must use the 2019 edition per ESM Ch. 2, D40GEN, [Attachment 1](#), Adopted Editions of NFPA Fire Protection Codes, Standards, and Recommended Practices (projects underway might be using older editions).

There have been similar AMD and errata postings for other NFPA documents recently, so please be aware.

DOE TECHNICAL STANDARDS ACTION

[Tech Stds Program postings](#) are listed on the [Technical Standards Portal](#).

No updates this month.

MSS DOCUMENT ACTION

[Operation and Maintenance Criterion and related Preventative Maintenance Instructions](#) (PMI) are standards with which system and plant engineers should be familiar. Implementation is required 30 days from issue date for non-nuclear facilities, 60 days for nuclear facilities. Questions? Contact the document author shown on its approval page.

Below are recent changes issued by Maintenance and Site Services Division per Jeremy Vonharders. Click [here](#) to access. If you have issues with SharePoint sites, use a Microsoft browser (e.g., Edge) to access them.

PMI 720-C Rev 6: Fire Alarm Systems Yearly Inspection, Testing, and Maintenance for High-Hazard, High-Value, and Nuclear Facilities

- Changed "BM Building Manager" to "MC (Maintenance Coordinator/BM (Building Manager))"
- Moved section 1.19 from section 2.5.16.
- Corrected numerical typos in section 3: step 4.5 becomes step 3.2.5; step 4.9 becomes step 3.2.9; step 4.9.1 becomes 3.2.10.
- Added impairment tag instructions to match other 720 PMIs.
- Added area codes to phone numbers.
- Added step for Radiant Energy Testing during Yearly Pre-Maintenance.
- Added step for disabling horns and lights during Yearly Pre-Maintenance.
- Added clarification for single battery testing during Yearly Inspection, Testing, and Maintenance.
- Added three steps for Impairments during Yearly Inspection, Testing, and Maintenance

PMI 431-A Rev 2: Automatic External Defibrillator (AED)

- Removed steps indicating the need to turn on the AED device during monthly maintenance per supplier's recommendation, thereby saving time during maintenance checks.
- Changed approver from Sam Garcia, Acting MSS MP Group Leader, to current MSS MP Group Leader Joseph Beauregard.

WHEN GOOD CONDUCT OF ENGINEERING ISN'T FOLLOWED

For all engineers including licensed professional engineers, we have an ethical responsibility to ensure that the engineering design is performed properly and is verified for accuracy to ensure public safety. All states in the US require licensed professional engineers to sign and seal their design deliverables including drawings and calculations; the sign and seal represents an ownership of the design. In addition, to stress the importance of this responsibility, many states require licensed professional engineers to take ethics training on a regular basis to maintain their license.

At LANL, Ethics Month just ended, article [here](#).

ARCHITEXTS



Special note to Amy G -- we'll miss you. You were never in CoE proper but one of its greatest champions!

LAST MONTH'S UPDATE TOPICS

[Miss an issue? The archive is at "Monthly Update" on the Standards homepage. Last month's topics:](#)

- New ES-WPD Group Lead
- New ES-IF and ES-UPD Groups
- New Pressure Safety Program Manager
- Training & Qualification
- LANL Engineering Standards Issued in October
- National Standards Action
- DOE Technical Standards Action
- MSS Document Action
- When Good Conduct of Engineering Isn't Followed

The views expressed in this email are not necessarily those of the Engineering Standards Team's employer.

To request a change to this newsletter's distribution or to send comments/suggestions, please email engstandards@lanl.gov.

