Engineering Standards Update

News from Engineering Standards Program

Jan. 3, 2024

Standards are serious business but this newsletter isn't always.

Topics this month:

- New ES-WPD Acting Group Lead
- Training & Qualification
- LANL Engineering Standards Issued in December or so
- National Standards Action
- DOE Technical Standards Action
- MSS Document Action
- When Good Conduct of Engineering Isn't Followed

Wishing you and your family a Happy New Year 2024!

Our resolution for the new year is to reduce meetings and get more done! What's yours?

NEW ES-WPD ACTING GROUP LEAD

Michael Braden is the acting Deputy Group Leader for ES-WPD per Laila Badran on Dec 11th. Michael Braden came to ES-WPD with an abundance of project delivery experience from his 15+ years in the architecture and construction fields outside of LANL. Michael has been a project engineer with ES-WPD for 2 years handling various types of projects at WFO. He is heavily involved in the division's commercial initiative and had been a member of the PE leadership team at ES-WPD.

TRAINING & QUALIFICATION

Courses, Seminars, Programs

PSO Overview, #52955 – Jan 8 - 11, 16-18, 22 (must attend all sessions), 2:00-3:30 pm, Teams
Ari Swartz is leading this instructor-led course to familiarize participants with pressure safety concepts that a Pressure Safety Officer (PSO) needs an understanding of to perform the roles and responsibilities of being a PSO in an interim capacity.

CoE: LANL Engineering Standards Overview #52693 – Jan 22, 2:00-4:00 pm, Teams
If you're new, don't have 8-hour Course #24140 Intro to LANL Engineering Standards in your training plan, or just want to learn about the standards for 2 hours, then you can take this shortened course taught by Neha Gidwani.

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: Design Engineer ES-EPD Article 250 Conductors Duty Area 9, #55880 – Feb 1, 9:00-11:00 am, Teams
Eric Stromberg is leading this instructor-led course. It is required for completion of Duty Area 9 for DE qualification of Electrical Engineers (per UTrain curricula 14186).

CoE ASME B31.3 Process Piping Code, #53900 – Feb 12-15, 20-22, 26 (must attend all sessions), 2:00-3:30 pm, Teams
Ari Swartz is leading this instructor-led course to familiarize participants with ASME B31.3 Process Piping Code as related to the duties of a Pressure Safety Officer.

CoE Commercial Grade Dedication (CGD), #30727 - Preparers Course - Feb 15, 9:00 - 11:00 am, Teams
For those of you who will serve as LANL CGD Preparers including Procurement engineers, select CSEs and Quality SMEs, both Courses #30726 (prerequisite) and #30727 are required. Contact instructor John Lamendola with questions.

Onboarding Training Courses by CoE Office, Teams:

- CoE Quality Assurance Overview for Engineers #53523, Jan 11, 8.30 - 9.30 am
- CoE ES LANL Organization and Engineering Divisions Introduction #54659, Jan 10, Jan 17, Jan 24, Jan 31, Feb 7 10.30 - 11.30 am
- CoE ES Onboarding: Job Functions of Roles #54860, Jan 11, Jan 25, Feb 8 11.30 am - 12 pm
- COE Engineering Initial Onboarding #54864, Jan 10, Jan 31 10 - 10.30 am
- ES Onboarding: AP Introduction and Common APs Deep Dive #54871, Jan 25 1 - 2 pm
- COE Configuration Management Overview #55231, Jan 11, Jan 25, Feb 8 9.30 - 10.30 am.

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 DECEMBER OR SO

Engineering Standards Manual ESM STD-342-100

Chapter	Section	Title	Rev.	Date	Comments
Chapter 7 – Electrical	D5090	Posted Variance VAR-10641, Lightning Protection Ground Ring Minimum Distance	-	1/2/2024	Thanks to POC Eric Stromberg
Chapter 16 – Building Code Program	Chapter References and Resources	Listing of LBO-Approved IBC Testing, NDE, and Inspection Agencies; Fabricators; and Products	-	11/20/23	Thanks to Chief Inspector Robert Abeyta
Chapter 16 – Building Code Program	Chapter References and Resources	Construction Subcontractor Office Trailer and Equipment Container - LANL Requirements & Application for Approval	1	12/28/23	Thanks to POC Tobin Oruch, Michael Braden, Logan Tietjen, Keenan Dotson, and others
Chapter 17 – Pressure Safety	Chapter References and Resources	NASME Reputable Manufacturers List and Approval Process	-	12/13/23	Thanks to POC Ari Swartz

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.

NEMA Z535.2, **American National Standard for Environmental and Facility Safety Signs**
Publication Date: **2023**
Type of Change: **Complete Revision**

IEEE C2 ERTA, **National Electrical Safety Code**
Publication Date: **11/15/2023**
Type of Change: **Errata/Erratum** (Note, ESM Ch. 1 Z10 says errata shall be followed)

DOE TECHNICAL STANDARDS ACTION

Tech Stds Program postings are listed on the Technical Standards Portal.

DOE-STD-8001-2023, **Environmental Protection Oversight Functional Area Qualification Standard**
Publication Date: **Nov 1 2023**

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.

O&M 431 Rev 2: Automatic External Defibrillators (AED)

Changed signature/approvers to match current organization.

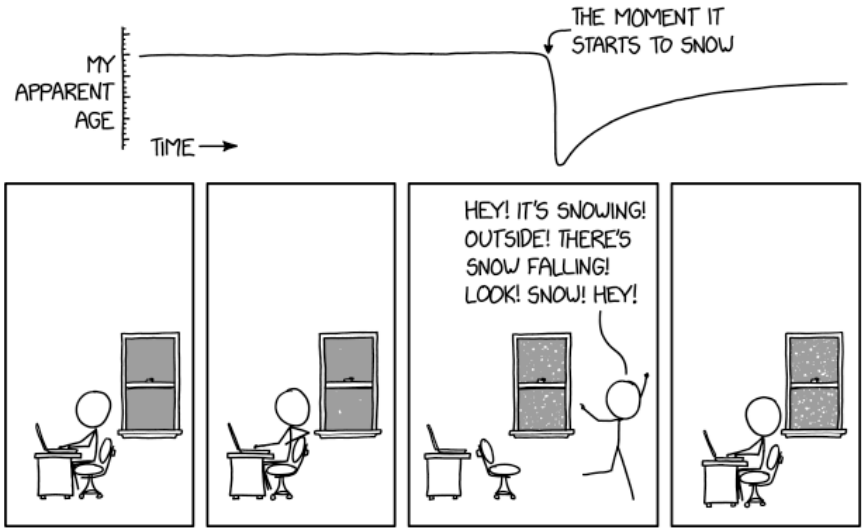
Modified Section 6.2.2, Monthly Service and Maintenance, as follows:

- Note that if the device beeps, the user will turn on the device to listen to warning messages.
- Note that if the device displays a red light, then user will turn on the device to listen to warning messages.

PMI 410-D: Fan Start-Up Checklist and Post Maintenance Testing (PMT)

- Initial Issue

Snow



For someone who has ostensibly outgrown staying up late waiting for Santa, I do spend an awful lot of time refreshing websites to see if packages are here yet.

xkcd, 177 Huntington Ave Ste 1703 #75312, Boston, Massachusetts 02115-3153 US

WHEN GOOD CONDUCT OF ENGINEERING ISN'T FOLLOWED

An interesting read below on curbs….a simple example but leads to deep thinking about the old quality-time-cost dynamic. You can achieve 2 of the 3 but not all 3!

Nice Curbs! | Comments From a Spec Writer (lizosullivanaia.com)

Here is a summary from the article: We rarely get good quality, with fast construction time, with low cost. Something can be built well – good quality – but it'll cost more and may take more time than producing something of lesser quality. Something can be built quickly, but compared to something built on a more typical schedule, it will either cost more or be of lesser quality, or both. Something can be built cheaply, but the quality is likely to be poor.

For me, quality always includes durability – effectiveness and appearance over the long term. A higher-initial-cost, more durable building component can cost less in the long run, because of lower

maintenance costs over its service life. Durable building components almost certainly look better over the long term, too. With cheap materials, there is often a period of time after their beauty has been exhausted but before they have been replaced, during which they are unbearable to look at. Durable things age gracefully. The beauty of an object, whether it's part of a building, a piece of furniture, a good quality leather bag, or even a curb on the side of the road, is an incentive to keep and properly maintain the thing so that it continues to serve its purpose. Those nice curbs last long, look good for decades, maybe centuries, even when scraped by snowplows, and therefore probably cost less in the long run. Win-win-win.

LAST MONTH'S UPDATE TOPICS

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

- 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

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.

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