
ENGINEERING STANDARDS UPDATE

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

Topics this month:

- **Training & Qualification**
- **Engineering Processes News**
- **LANL Standards Issued in November**
- **DOE Technical Standards Action**
- **National Standards Action**
- **MSS Document Changes**
- **When Good Conduct of Engineering Isn't Followed**

The LANL Engineering Standards: <http://engstandards.lanl.gov/>

Note: This newsletter has hyperlinks all over but their formatting may not show. Please hover your cursor where you might expect one.

TRAINING & QUALIFICATION

CoE T&Q website makeover! Thanks to Christina Salazar-Barnes, the T&Q team, and of course Dan Tepley: <https://int.lanl.gov/org/ddops/aldfo/engineering-services/conduct-engineering/engineering-training-qualification-1.shtml>

NOTE: Several courses are being offered in December but not often—don't miss out!

ESM Chapter 21 Software -- Overview and Owners Courses – Dec 7 +/- Dec 9, Webex

A few of you are new “Owners” of nuclear safety or other ML-1, -2, or -3 software (installed in a system, or maybe for design/analysis). Most people in that situation are or soon will be subject to ESM Chapter 21 Software and need to take required training on the chapter. So...if you, in fact, need training, please enroll for the course(s) below. If you're not sure what you need, contact me (5-8475) or SME/instructor Joy Getha, 5-9586, jlgetha@lanl.gov. **Next offering will be many months from now so don't miss this chance if you're in need.**

- 38047 ESM Chapter 21 Software Overview Course Tues 12/7, 9-12:00. (RLMs and Owners)
- 34048 ESM Chapter 21 Software Owner's Course Thurs 12/9, 9-12:00 (just Owners return for this).

Webex info for both of the above is in UTrain and here:

Join from the meeting link <https://lanl-us.webex.com/join/jlgetha>
Tap to join from a mobile device (attendees only) +1-415-655-0002,,1339526086## US Toll

Safety Basis for Engineers, Course 39564, Wed, Dec 8, 9-11:30, Webex

POC: Joy Getha, 5-9586, jlgetha@lanl.gov. Has lots of TA55 examples but is generally applicable to any nuclear facility. Webex info is in UTrain, and here:

Join from the meeting link <https://lanl-us.webex.com/lanl-us/j.php?MTID=mb8c6c905303a25f58c3eb7e1db0c1ec2>

Tap to join from a mobile device (attendees only) +1-415-655-0002,,24609866828## US Toll

Engineering Standards Intro (UTrain 24140) Dec 13-16 (M-Tr) Webex each day from 10:00-noon (total of 8 hours). You must attend each day to receive credit.

This spellbinding and wildly popular (since required) course is humbly taught by Tobin and provides familiarity with national and LANL engineering standards for anyone performing, reviewing, or managing design activities. **Required** course for many LANL engineers, recommended for those at local AE firms, and **only taught a couple of times a year--so thanks for your patience waiting and hope most can attend.** Webex info is in UTrain and here:

Join from the meeting link <https://lanl-us.webex.com/lanl-us/j.php?MTID=mb8cd98f9fdb980d4b76d6d7562bc0f4c>

Tap to join from a mobile device (attendees only) +1-415-655-0002,,24665974023## US Toll

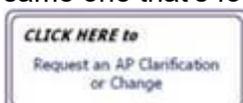
Registering for UTrain Courses: Go to UTrain, search on course, select and enroll. Disenroll if you have to bail. AEs can also register for some; use token (CryptoCard) or contact ES training guy Stan Hayes (sehayes@lanl.gov) with Z number. Webex format registrants will receive instructions prior to start.

ENGINEERING PROCESSES NEWS

From CoE Eng Process Manager Sarah Murdock:

AP-341-405 R6.1, Identification and Control of Technical Baseline in Operating Facilities	
Admin change effective 11/18/2021	
Removed references to Master Document List; this concept has been replaced with the Technical Baseline Document List for the facility.	

Please enter issues with APs in the SharePoint issues database. Use the live button below, same one that's found in the upper right of the Processes SharePoint homepage.



LANL STANDARDS ISSUED IN NOVEMBER
Engineering Standards Manual ESM STD-342-100

Chapter	Section	Title	Date	Comments
Ch. 1, General	Section 200	Item Numbering and Labelling – Att 2, MEL Upload Workbook, beta version A	11/10/2021	Thanks to Ryan Keyser, Alan Yaeger.
Ch. 14, Sustainable Design	References	Created new, linked refs webpage. Added new LANL 2020 GP Handbook DRAFT 2021.10.18 and other files.	11/18/2021	Thanks to Dee Bangert, UI.
Ch. 16, IBC Program	References	Updated org chart for NDE Chief Inspector	11/9/2021	

Master Specs STD-342-200

Spec Number	Rev.	Spec Title	Effective	Summary
01 3300	6	Submittal Procedures	11/19/2021	Added separate instructions for FM01-W Waiver, r0. Thanks to Tadz Kostrubala, Amy Gitnick.

STD Drawings and Details STD-342-400

Chapter	Topic	Dwg. #	Sheet	Rev.	Title	Date	Summary
I&C and Mechanical	P&ID Legends	ST6999 (M0002)	2	2	P&ID Legend	11/17/2021	Updated table, notes, general notes, font, title block to align with ESM Ch1 230 Att 1. Thanks to Louise Tsiagkouris, Andrew Molina, Scott Richardson, POC Allen Hayward.

DOE TECHNICAL STANDARDS ACTION

Tech Stds Program postings in the past month: None

From the 'net and not edited for propriety, so sure hope no one's offended by any.

PARAPROSDOKIANS are figures of speech in which the latter part of a sentence is unexpected.

Winston Churchill loved them.

Some examples:

1. Where there's a will, I want to be in it.
2. Since light travels faster than sound, some people appear bright until you hear them speak.
3. If I agreed with you, we'd both be wrong.
4. War does not determine who is right - only who is left.
5. Knowledge is knowing a tomato is a fruit. Wisdom is not putting it in a fruit salad.
6. They begin the evening news with 'Good Evening,' then proceed to tell you why it isn't.
7. To steal ideas from someone is plagiarism. To steal from many is called research.
8. In filling in an application, where it says, 'In case of emergency' - notify: I put 'DOCTOR.'
9. I didn't say it was your fault, I said I was blaming you.
10. Women will never be equal to men until they can walk down the street with a bald head and a beer gut, and still think they look sexy.
11. Behind every successful man is his woman. Behind the fall of a successful man is usually another woman.
12. A clear conscience is the sign of a bad memory.
13. I used to be indecisive. Now I'm not so sure.
14. Nostalgia isn't what it used to be. Nor is there any future in it.
15. Change is inevitable, except from a vending machine.
16. Going to church doesn't make you a Christian any more than standing in your garage makes you a car.
17. Finally: I'm supposed to respect my elders, but it's getting harder and harder for me to find one now.
18. I am not arguing with you, I am explaining why you are wrong.

NATIONAL STANDARDS ACTION

LANL's IHS Eng Workbench online codes & standards subscription news.

Several ASHRAE standards are under continuous maintenance; they issue addenda and we follow them per ESM (Z10).

Document number: ASHRAE 55 ADD D, **Thermal Environmental Conditions for Human Occupancy**

Publication Date: **10/29/2021**

Type of Change: **Addenda/Addendum**

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

Publication Date: **11/1/2021**

Just an FYI on NFPA since ESM Ch 2 Fire Protection Att 1 – *Adopted Editions of NFPA Fire Protection Codes, Standards, and Recommended Practices* directs the use of various editions, not just-issued ones. Att 1 will probably be updated in 2022 (LANL planning to adopt most 2021 building codes).

Document number: NFPA 13, **Standard for the Installation of Sprinkler Systems, 2022**

Document number: NFPA 20, **Standard for the Installation of Stationary Pumps for Fire Protection, 2022**

Document number: NFPA 72, **National Fire Alarm and Signaling Code, 2022**

Document number: NFPA 80, **Standard for Fire Doors and Other Opening Protectives, 2022**

Document number: NFPA 2001, **Standard on Clean Agent Fire Extinguishing Systems, 2022**

MSS DOCUMENT CHANGES

Below are recent changes issued by Maintenance and Site Services Division per Jeremy vonHarders.

O&M Criterion/PMI Changes

Operation and Maintenance Criterion and related Preventative Maintenance Instruction (PMI) are standards about which system 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.

If you have issues on the SharePoint site use Internet Explorer to access them. Access to all such documents when no direct link is shown below: https://logistics.lanl.gov/MSS/_layouts/15/start.aspx#/Policy%20%20Procedures/Forms/Public.aspx_____

Circa 11/17:

O&M 411 Rev2: Compressed Air Systems and Equipment

- Added blowdown valves to Operations Requirements.
- Added semi-annual and annual air compressor maintenance to Maintenance Requirements.
- Added requirements for semi-annual and annual maintenance of scroll air compressors.
- Added requirements for semi-annual and annual maintenance of rotary screw air compressors.
- Added requirements for semi-annual and annual maintenance of reciprocating air compressors.
- Added requirements for semi-annual and annual maintenance of desiccant type dryers.
- Added new and updated existing references.
- Updated to current template and logo guidelines.

Direct: https://logistics.lanl.gov/MSS/_layouts/15/WopiFrame.aspx?sourcedoc=/MSS/Policy%20%20Procedures/411.pdf&action=default

O&M 505 Rev4: Stored Energy Power Supply and Optional Standby Systems

- More clearly defined the scope to be on the UPS portion of SEPSS and OSS.
- Updated to meet most current versions of applicable NFPA and IEEE standards.
- Removed battery maintenance requirements and refer battery maintenance to O&M 511.
- Removed references to O&M 510 since O&M 510 no longer exists and reference applicable O&M and NFPA 70B Chapter.
- Included maintenance and operation of Optional Standby Systems as defined in NFPA 70 in addition to Level 1 and Level 2 systems.
- Re-formatted to remove redundant information where appropriate.
- Updated definitions where appropriate to match current definition in reference document it comes from.
- Removed dated material.

Direct: https://logistics.lanl.gov/MSS/_layouts/15/WopiFrame.aspx?sourcedoc=/MSS/Policy%20%20Procedures/505.pdf&action=default

WHEN GOOD CONDUCT OF ENGINEERING ISN'T FOLLOWED

I'm running low on CoE material, but this is close. You can debate it...just leave me out of it, please!

**LAST MONTH'S UPDATE TOPICS**

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

- **Training & Qualification**
- **Engineering Processes News**
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The views expressed in this email are not necessarily those of my employer. To request a change to this newsletter's distribution, please contact me.

Tobin Oruch, Engineering Standards Mgr
Los Alamos Nat'l Lab, Conduct of Eng Program Office
(505) 665-8475 oruch@lanl.gov <http://engstandards.lanl.gov/>
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