

ENGINEERING STANDARDS UPDATE

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

This is the monthly newsletter of the LANL Conduct of Engineering Office's Engineering Standards Program. The Standards define the minimum technical requirements for the design, fabrication, construction, commissioning, repair, and replacement of both new and existing equipment and facilities, including both maintenance and modification, for programmatic and facility work at LANL [[PD340](#)].

Topics this month:

- **May Is National Building Safety Month**
- **CoE Training – Including Standards Course**
- **Safety Instrumented Systems Course June 20-21**
- **Engineering Processes Changes**
- **LANL Standards Issued in April**
- **DOE Technical Standards Actions**
- **When Good Conduct of Engineering Isn't Followed**

The Standards Homepage: <http://engstandards.lanl.gov/>

April was a big month for CoE: revamp of the key change control processes, new grout spec, other important spec revisions, and issuance of new Standard Details for stairs that can be used for portables. See articles below.

MAY IS NATIONAL BUILDING SAFETY MONTH

This news item from the International Code Council is included on behalf of everyone associated with the LANL Engineering Standards, from their creation and upkeep to their use in design, construction, and inspection. Through a lot of hard work over many years by many people, I'm now confident that building construction at LANL provides users the basic level of occupant safety required by the codes -- and that same construction also saves the taxpayer money by ensuring higher levels of quality, standardization, and safety for workers and the public where appropriate. While I'm not exactly certifying the stockpile to the President here, this is a bold statement that I have not made until now.

From ICC:

For the second consecutive year, President Obama signed a Presidential Proclamation declaring May as National Building Safety Month. "We thank President Obama for recognizing the importance of building safety and join him in saluting code enforcement officials for their contributions to building safe and sustainable communities across the nation and around the globe," [said Code Council](#) CEO Richard P. Weiland.

The Presidential Proclamation reads, in part: "Whether protecting our communities from fires, floods, earthquakes, severe storms, or other disasters, building safety professionals play a critical role in making America safe, strong, and sustainable. [This month](#), we celebrate their work, and we rededicate ourselves to ensuring our Nation remains ready and resilient." [Click here](#) to read the complete Presidential and other state and local Building Safety Month proclamations.

COE TRAINING – INCLUDING STANDARDS COURSE (CORRECTED)

As discussed last month, the training schedule has been reset by Mike Brazile following Lyle Kerstien's retirement. The new schedule is shown below. Anyone who was scheduled or waitlisted for any of these classes will be automatically enrolled for the new course date by registrar Yolanda J. Trujillo, ytrujillo@lanl.gov, 665-5696. She sends email confirmation prior to courses and has done so for the two May courses within the past week. Contact Yolanda if you wish to enroll, cancel, etc. Another round is being planned for October-December.

May-August 2012 Cycle Taught in MSL Auditorium (TA-3 BLDG 1698, directly across from CMR)

DATE	ITEM	COURSE TITLE	INSTRUCTOR	TIME
5.23.12	43663	Technical Baseline	Gurinder Grewal	8 A.M.-5 P.M.
5.30.12	45666	Design Management	Gurinder Grewal	8 A.M.-5 P.M.
6.07.12	43662	Quality	Dan Tepley	8 A.M.-5 P.M.
6.27.12	43668	Project Engineering Processes	Mike Clemmons	1-5 P.M.
7.11.12	24140	Engineering Standards Introduction	Tobin Oruch	8 A.M.-5 P.M.
8.01.12	43665	Support to Operations and Maintenance	Gurinder Grewal	8 A.M.-5 P.M.
8.08.12	43667	Maintenance Processes	Kyle Carr	8 A.M.-NOON
8.08.12	40797	Work Control Processes	Kyle Carr	1-5 P.M.

SAFETY INSTRUMENTED SYSTEMS COURSE JUNE 20-21

The DOE National Training Center is sponsoring a course on the recently issued [DOE-STD-1195](#) here at LANL -- June 20-21, Canyon Complex Room 164. The course is SAF-281, Design of Safety Significant Safety Instrumented Systems Used at DOE Nonreactor Nuclear Facilities. There's NO COST and no reason to miss this local opportunity if you are a designer or safety basis professional involved in this.

The NTC course schedule fills are [here](#). The registration page is [here](#). One must create an account (if trouble, contact Ronald Jasper, 505-845-5170 x315), register for class SAF-281, and wait for an email from LANL's Janet Martinez (DOE employees use "CHRIS"). If you don't receive an approval email within 10 days, follow up with Janet.

ENGINEERING PROCESSES CHANGES

The following Administrative Procedures changes occurred last month. For a listing of all APs, visit the Conduct of Engineering Office, [Engineering Processes](#) page. For questions about the contents of the APs, please contact Program Manager Gurinder Grewal at ggrewal@lanl.gov or 667-3667. Always ensure you are working to the latest revision being implemented by your facility.

[AP-341-521-R0](#) Identification and Control of Critical Spare Parts

[AP-341-507-R1](#) SSC Control Software Change Package

[AP-341-517-R1](#) Design Change Form (MAJOR REV!!!!!!!!!!!!!!)

Description of Revision
<p>This revision:</p> <ul style="list-style-type: none"> ▪ Incorporates user feedback and lessons learned ▪ Integrates this AP with project management, maintenance, and operations procedures. ▪ Deletes the use of DCF for document only changes. Technical baseline document only changes process is moved to AP-341-405, <i>Identification and Control of Technical Baseline in Operating Facilities</i>. ▪ Replaces: AP-341-505, <i>Design Change Package</i>, AP-341-506, <i>Engineering Change Notice</i>, AP-341-518, <i>Hardware Modification Traveler</i>. ▪ Reformats the AP to the format similar to the Policy Office procedure format.

LANL STANDARDS ISSUED IN APRIL

Drawings and Details STD-342-400	
Structural	
ST-B1081-1-Metal Stairs - General Notes Optional Use	Initial Issue. Rev. 0
ST-B1081-2-Metal Stairs - Detail Optional Use	Initial Issue. Rev. 0
ST-B1081-3-Metal Stairs - Details Optional Use	Initial Issue. Rev. 0
Master Specifications STD-342-200	
03 1512 R3 - Post Installed Concrete Anchor - High Confidence	Added inspect and test requirements from former 03 1550, permitting flush-mount Maxi-bolts, clarified first line inspection by installer organization, other minor changes.
03 1534 R4 - Post Installed Concrete Anchors - Normal Confidence	Added inspection requirements from former 03 1550, clarified these are installer inspections, permitted flush-mount Maxi-bolts, other minor changes
03 1550 R3 - Post Installed concrete Anchors - Installation and Testing	Canceled (see above)
03 3001 R5 - Reinforced Concrete	Update for IBC 2009 including more durable mix designs, plus changes regarding form ties, air content when pumped, sight glass use, etc.
03 6000 R0 - Grout	Initial issue, expanding requirements formerly in 03 3001, 05 1000, and other locations.
05 1000 R4 - Structural Metal Framing	OSHA related wording (i.e., on column anchors) & grout-related requirements changed, to include baseplate-installation requirements.
05 2100 R3 - Steel Joist Framing	Grout-related requirements changed
05 5000 R3 - Metal Fabrications	Grouting, baseplates now reference 03 6000 and 05 1000
05 5213 R1 - Pipe and Tube Railing	Grouting requirements now reference 03 6000, other minor changes
ESM STD-342-100	
Chapter 5 Structural	
Section IV Rev. 5 - Geotechnical Investigations	Change to Part 2.2.B on boring spacing

DOE TECHNICAL STANDARDS ACTIONS

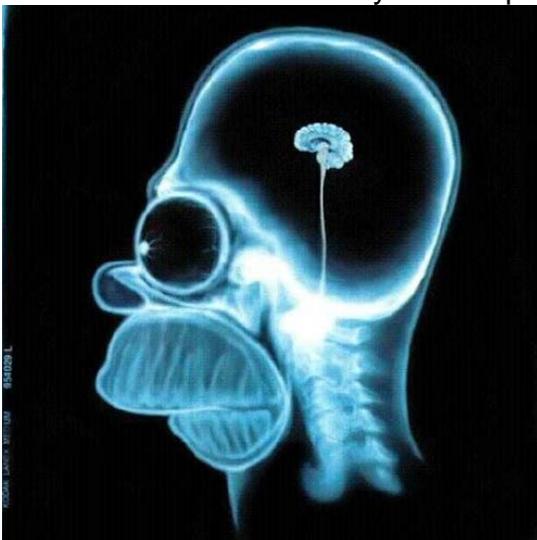
New or revised DOE [Tech Stds](#) this past month: DOE-STD-1063-2011 CN 1, Facility Representatives located [here](#).

WHEN GOOD CONDUCT OF ENGINEERING ISN'T FOLLOWED

In honor of Building Safety Month. This one's so crazy it's apparent there was no design or inspection. CMUs look a little narrow, too, and I doubt they're reinforced or grouted, either.



And because March's x-ray was so popular, here's another (not me this time):



LAST MONTH'S UPDATE TOPICS

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

- **It's All in the Wrist**
- **How to Access the IBC Online**
- **IHS Training Tues, April 10**
- **Temporary Trailer Anchorage Standard Details**
- **LANL Building Official Approval Listing Update**
- **Lyle Leaving**
- **Safety Instrumented Systems Course**
- **Engineering Processes Changes**
- **LANL Standards Issued in March**
- **DOE Technical Standards Actions**
- **When Good Conduct of Engineering Isn't Followed**

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
TA-16-200 M/S P948 ph (505) 665-8475 fx 667-5405
oruch@lanl.gov <http://engstandards.lanl.gov/>
Please consider the environment before printing this email