

**ENGINEERING STANDARDS UPDATE**

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

**Topics this month:**

- **New Conduct of Engineering Office Director**
- **Engineering Processes Changes**
- **Online National Standards Access**
- **Training & Qual**
- **LANL Standards Issued in November**
- **Receipt Inspection Criteria Changes**
- **DOE Technical Standards Action**
- **National Standards Action**
- **When Good Conduct of Engineering Isn't Followed**

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

**NEW CONDUCT OF ENGINEERING OFFICE DIRECTOR**

Julie Minton-Hughes was named the new Office Director for Conduct of Engineering, taking over from Bill Kerley who was standing in after Mel Burnett retired last summer. That also makes her the Deputy Division Leader for Facility Engineering. She's transitioning from the EWMO FDAR role now and will soon in a position to hear about all the great things that we in CoE do for you (or your ~~whining~~ other input).

**ENGINEERING PROCESSES CHANGES**

The following Administrative Procedures have been posted on the AP [SharePoint site](#):

<b>AP-341-603-R0.1</b>	<b>Alternative Studies</b> Administrative change only	<b>Issued:</b> 12/04/17	<b>Effective:</b> 01/09/18
<b>AP-341-621-R3</b>	<b>Design Authority Technical Review</b> Course 44270 (for those assigned)		

For questions about CoE engineering processes, please contact POC [Jeff Fauble](#) (5-0595).

## ONLINE NATIONAL STANDARDS ACCESS

From the 11/2/2017 issue of



## Research Library News

[IHS Standards Expert is now Engineering Workbench](#)



Engineering Workbench

Engineering Workbench is the new interface for IHS Standards Expert, our primary database providing access to standards, codes and specs. As of November 2017 connections go to the new interface, and login uses LANL weblogin with Z# and cryptocard. If you had an individual account in the old interface, you will no longer need a username/password, and the Current Favorites and Watch Lists from your account have been transferred over to the new system.

Engineering Workbench provides full-text search, 'standards-tuned' document number search and results display, advanced filters, redlines, historical notes, automated notifications and more.

A guided tour is offered when you first use the new Engineering Workbench. The [Quick Start Guide \(pdf\)](#) is also a good resource.

IHS provides a wide range of standards, but for all standards available through the library, whether from IHS or elsewhere, visit the [Standards page](#).

### TRAINING & QUAL

To register for LANL courses, sign up via [UTrain](#). Enter course number in search field, assign to yourself. Disenroll a similar way if you have to bail. AEs can also register; contact Yolanda Trujillo at 665-5696 or [ytrujillo@lanl.gov](mailto:ytrujillo@lanl.gov) with Z number.

### **Firestopping—Plan, Review and Inspection – THIS THURS, Dec 7, 8a-4p**

UTrain Course 39528 White Rock Training Center – TA-00-1308-118, 8 a.m. to 4 p.m.

Firestopping has become a hot topic because of the new Firestop Inspector requirements in the 2012/2015 International Building Code (IBC). This training is designed for Plans Examiners, Fire and Building Inspectors, Contractors, Architects and Engineers. We will review the requirements of sections 714 and 715 of the IBC for joint systems, perimeter containment, through and membrane-penetrations. Discuss the new ASTM firestop inspection standards. This program will also provide code compliant solutions along with helpful hints for plans examiners and inspectors. Training is provided by an external vendor, Fire Containment Training Services (FCTS).

### **ADE Ethics Training for Engineering 2017**

Discussed last month, this optional, 1-hr, online UTrain course 38145 is now expected by the week of December 11. It was delayed due to unforeseen production difficulties. The purpose of this course is to "provide you with the skills and knowledge to resolve situations requiring ethical

judgment and to get help when you are unsure of the best course of action to take. It is tailored to address ethical situations of interest to Professional Engineers (PEs) and specifically reviews the Rules of Professional Conduct that apply to PEs licensed in the state of New Mexico.”

**LANL STANDARDS ISSUED IN NOVEMBER**

<b>ESM <a href="#">STD-342-100</a></b>	
Chapter 7 Electrical, Section <a href="#">D5010, Electrical Service &amp; Distribution</a>	Issued site wide VAR-10200, Voltage Drop Requirements in ESM, on 12/4 (thanks to POC Eric Stromberg)
Ch 17 Pressure Safety, thanks to POC Ari Ben Swartz:	
Section EXIST	Issued Site wide VAR-10198, In-process Examination of Tie-in to Existing Contaminated Wet Vac Piping
Section NASME	Reference: Reputable Manufacturers list updated

<b>Master Specifications <a href="#">STD-342-200</a></b>	
Thanks to Darren Meadows in QPA for these (they really are here to help!), along with Structural Specs POC Glen Pappas plus Jeremy Nowell for the concrete ones:	
01 4000R7 Quality Requirements-Non-nuclear Project Version	Major revision incorporating experience from TRP II UPS and TLW. Thanks to Darren Meadows for this and the new nuclear version.
01 4000R0 Quality Requirements-Nuclear Project Version	Initial issue aka <b>NEW!!!!</b>
03 3021R1 Reinforced Concrete - High Confidence	Incorporated experience from TRP UPS, RANT, other projects. Added VIT as Att. A.
03 3021 Technical Evaluation and Acceptance Plan (TEA) for Commercial Grade Dedication (CGD) of Reinforced Concrete - High Confidence Rev. 0	Initial issue replacing CGD plan IDED-STD-03_3001. <b>NEW!!!!</b>
03 2021 Reference: High Confidence Concrete Readiness Review Checklist (xls)	<b>NEW!!!!</b>
Thanks to Mechanical POC Michael Ladach and, for some HVAC ones, John Sur:	
22 0529R4 Hangers and Supports for Plumbing Piping and Equipment	Deleted inserts, updated submittals section, updated hanger spacing distances
23 3400R1 HVAC Fans	Added seismic design notes, updated submittals section, added plenum fans
23 6200R1 Packaged Compressor and Condenser Units	Updated submittals section, added editor's notes for seismic design
23 7413R3 Packaged, Outdoor, Central Station	Updated submittals section, added editor's notes for seismic design, updated MERV requirements
23 8123R1 Computer Room Air-Conditioners	Updated submittals section, added editor's notes for seismic design

23 8239R1 Unit Heaters	Updated submittals section, Added editor's notes for seismic design
23 7300R0 Indoor Central-Station Air Handling Units -- CANCELLED	This spec was rarely used, and had many out of date references. It was based on the Trane Modular Climate Changer product line, and Trane has completely updated this line since this standard spec was developed in 2010.
Thanks to Electrical POC Eric Stromberg and I&C POC Allen Hayward:	
25 0519R1 Low Voltage Electrical Conductors and Cables for BAS Electrical Systems	Changed compliance with the NEC statement to installation requirements only. Remove requirement for items to be listed for the condition, environment, installation. The requirement now is simply to be listed. Edited color codes to be more specific. Added 600 volt insulation, as an option, for BAS cables. Added conditions at to when 600 volt cable is used.

## INTERESTING GLOBAL CONSTRUCTION TRIVIA

From the International Code Council's Newsletter

### Did you know?

Mohawk Indians were employed by construction companies in the early through mid-20th century New York City since they did not fear heights or dangerous conditions. They helped build bridges and skyscrapers and [were called "skywalkers" because of their fearlessness](#). Mohawk skywalkers participated in building the Empire State Building, and the World Trade Center buildings that were destroyed during the September 11 attacks. They helped rescue people from the burning towers in 2001, and helped dismantle the remains of the building afterwards. Approximately 200 Mohawk iron workers participated in rebuilding the One World Trade Center in Lower Manhattan.

## RECEIPT INSPECTION CRITERIA CHANGES

Excerpt of what was just sent out today to TSMEs/QSMEs by Miller Collins on behalf of Jeremy Valentine (QPA-IQ) below; if you didn't get this and need the attachment, Miller can provide:

Historically the QPA Receipt Inspection Team (RIT) has accepted an informal email from requestors or TSME/QSMEs as a method of correcting or changing Procurement Documentation (e.g. Exhibit H and Form 1952) that either had erroneous requirements or correct requirements that the vendor did not provide documentation for. Emails will no longer be accepted as a method of changing the requirements of Procurement Documents. Instead, the documents will have to be revised, reviewed, and approved by the appropriate personnel. This is in accordance with NQA-1 Requirement 4 which states in part: "Procurement document changes affecting the technical or quality assurance program requirements shall be subject to the same degree of control as utilized in the preparation of the original documents." The potential impact of this will be that if a document states erroneous requirements or correct requirements which either have not been met or cannot be met by the supplier of items

procured, and the documents cannot be revised within the 5 working day window allowed by P330-6, a Nonconformance Report (NCR) will have to be generated.

In the interest of helping those personnel who generate procurement documents not create either erroneous documents or correct documents that are difficult for the vendor to meet or understand, the attached word document provides some guidance on the completion of Exhibit H and its quality clauses. Additionally, QPA offers Exhibit H Workshops (Utrain course #57386) which also provides tips regarding CMTRs, CofCs, and other requested documents.

### **DOE TECHNICAL STANDARDS ACTION**

[Activity](#) in the past month or so: None.

### **NATIONAL STANDARDS ACTION**

IHS reports these changes:

Document Number: **ACI 347R**

Publication Date: **7/1/2014**

Title: **Guide to Formwork for Concrete**

Status: **Revised**

Document Number: **ASHRAE 55 ADD A**

Publication Date: **10/31/2017**

Title: **Thermal Environmental Conditions for Human Occupancy**

Type of Change: **Addenda/Addendum**

Document Number: **NETA ATS**

Publication Date: **1/1/2017**

Title: **STANDARD FOR ACCEPTANCE TESTING SPECIFICATIONS for Electrical Power Equipment and Systems**

Type of Change: **Errata/Erratum**

## WHEN GOOD CONDUCT OF ENGINEERING ISN'T FOLLOWED

### MAILING LISTS

ARCHITEXTS



## LAST MONTH'S UPDATE TOPICS

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

- IHS Standards Expert has Changed to Engineering Workbench
- Training & Qual
- LANL Standards Issued in October
- ES-EPD Desktop Instruction Revisions
- DOE Technical Standards Action
- National Standards Action
- When Good Conduct of Engineering Isn't Followed

The views expressed in this email are not necessarily those of my employer.  
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