

## **ENGINEERING STANDARDS UPDATE**

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

### **Topics this month:**

- **IBC Program Graded Approach Revised Dec 22**
- **Commissioning POC Change**
- **Electrical Standards Course Feb 3**
- **NFPA 72 Fire Alarm and Signaling Course**
- **Call for R&D Engineering Abstracts by Jan 21**
- **LANL Standards Issued in December**
- **Engineering Process Changes**
- **CGD Tags and Qualified Preparers**
- **DOE Technical Standards Actions**
- **When Good Conduct of Engineering Isn't Followed**

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

### **IBC PROGRAM GRADED APPROACH REVISED DEC 22**

Last month's Update announced alternate method VAR-16-009 which streamlined the 3-tiered graded administrative approach of LANL's IBC Program. In late December, this VAR was revised to fine-tune the direction, with the biggest change being a new requirement to file Preliminary Project Determination forms in a specific SharePoint location to facilitate management of the new approach. The revised VAR and further-updated PPD form are webposted under ESM Chapter 16 Section IBC-GEN.

### **COMMISSIONING POC CHANGE**

Jim Bodnar, who's led the Startup and Commissioning Group for nearly a decade, is leaving LANL around January 22<sup>nd</sup>. Among many other accomplishments, Jim was the primary author and POC of ESM Chapter 15, Commissioning, issued in 2010. Matt Foster is replacing Jim and should be contacted for Cx questions.

Also leaving LANL this week is Roger Cardon, who's retiring from MSS-MP. Roger provided a lot of valuable input and assistance to the Standards Program over many, many years and we wish him well.

### **ELECTRICAL STANDARDS COURSE FEB 3**

Four-hour course 17998 covers the electrical engineering standards in Chapter 7 of the LANL Engineering Standards Manual and discusses mandatory requirements and good practices for those involved in electrical design. Strongly suggested for electrical designers, electrical engineers, electrical safety officers, and facility managers. AEs are also encouraged to attend. **Taught by Electrical Standards POC Eric Stromberg on Wednesday, Feb 3, 8am-12pm, White Rock Training Center (TA00-B1308-112).**

To register: Sign up via [UTrain](#) (AEs without cryptocard via Yolanda Trujillo at 665-5696 or [ytrujillo@lanl.gov](mailto:ytrujillo@lanl.gov) noting Z number)

- On [UTrain](#) click on the “catalog” tab and select “advanced catalog search”
- Enter Item Number 17998 as the “ID”, then “search”
- Add-to-do-list
- Go to your to-do-list and click on ‘register’

### **NFPA 72 FIRE ALARM AND SIGNALING COURSE**

Fire Protection Division is planning to offer courses on various NFPA standards on a quarterly basis for their staff and other SMEs, with the first on NFPA 72 Fire Alarm and Signaling. It is tentatively planned for March 22-24 at Canyon Complex (TA-00, Bldg 0199, Rm 165). It will cover initiating devices, notification appliances, control units and power supplies, circuits and pathways, emergency control functions interfaces, off-premises signaling, documentation and planning and approval, plan review activity, and accepting/commissioning. AEs may be able to attend on a space-available basis. Look for course number and other details in the February Update.

Future courses may include NFPA 13 Automatic Sprinkler Systems (June Timeframe) and NFPA 101 Life Safety Code Essentials (September Timeframe).

### **CALL FOR R&D ENGINEERING ABSTRACTS BY JAN 21**

Info from an email by Lynn Lemler:

As part of National Engineers Week 2016, February 21-27, Steve Girrens, Associate Director for Engineering Sciences (ADE), invites employees and students to share information about recent LANL R&D engineering projects at a poster session to be held in conjunction with a keynote address on February 24, 2016 at the J. Robert Oppenheimer Study Center - Santa Clara Gallery and Jemez/Cochiti Conference Room. This year’s national theme “Engineers Make a World of Difference” celebrates you—engineers, engineering students, and technicians—and all of the amazing things you do every day to make a difference in our world.

Poster titles and abstracts need to be submitted to Lynn Lemler, [llemler@lanl.gov](mailto:llemler@lanl.gov), no later than Thursday, January 21. Space is limited – we will only be able to accommodate up to 35 posters (dimensions: each 46-7/8” wide by 36.5” high, maximum). Acceptance notifications will be made no later than Wednesday, January 27.

Please call if you have any questions. Ph: 505-606-0000 Mobile: 505-695-5817

We look forward to your participation. Thank you so much.

**LANL STANDARDS ISSUED IN DECEMBER**

<b>ESM</b> <a href="#">STD-342-100</a>	
Ch. 16, IBC-GEN Form 01, Preliminary Project Determinations, Rev 4	Issued with VAR-16-009 r1
VAR-16-009 r1, IBC Program Graded Approach Streamlining	Posted with Chapter 16, IBC-GEN General Requirements
Ch. 16 Approved IBC Testing Agencies and Fabricators Listing	Updated

<b>Master Specifications</b> <a href="#">STD-342-200</a>	
VAR-16-004, Underground Fire Alarm; Trench and Conduit Design	Posted with spec 26 0533 Rev. 6 Raceway and Boxes for Electrical Systems

**ENGINEERING PROCESSES CHANGES**

A Variance and form revision related to AP-341-502, *Management Level Determination and Identification of Quality Assurance and Maintenance Requirements* and P341, *Facility Engineering Processes Manual* was posted to the Engineering Processes APs [SharePoint site](#).

<b>VAR-16-011</b>	Affecting AP-341-502-R4, System, and Equipment Management Level Determination and issuing AP-341-502-FM01 R5	<b>Issued:</b> 12/11/15
	and  P341, Facility Engineering Processes Manual Rev. 5	

In summary, the VAR revised the definition of ML-3 for OEITS and Vital Safety Systems, impacting:

AP-341-502, *Management Level Determination and Identification of Quality Assurance and Maintenance Requirements*.

1. Section 9.0 Definitions and Acronyms/ Management Level-3 (ML-3) First Bullet, Fifth Bullet, and Sixth Bullet.
2. Form AP-341-502-FM01, Rev 4/ System, and Equipment Management Level Determination, and associated form instructions.

P341, *Facility Engineering Processes Manual*,

1. Section 3.5, 3<sup>rd</sup> paragraph on page 15 and Fig 4 on page 16
2. Page 65; Vital Safety System (VSS)

Furthermore, here's a look back at APs that became effective last month:

<b>AP Number</b>	<b>AP Title</b>	<b>Effective Date</b>	<b>Issued Date</b>
<a href="#">AP-341-519-R4</a>	Design Revision Control	12/2/2015 (now)	11/2/2015
<a href="#">AP-341-703-R4</a>	Commercial Grade Dedication	12/15/2015	8/31/2015

Please note that APs, as a single pdf, are posted to the AP SharePoint upon issue to allow for training, USQ, etc.; however it is only once the effective dates are reached is archiving of the superseded AP and posting of the new Word forms performed. And, even so, this may not occur for a day or two after the effective date based on the work schedule of CoE doc control goddess Christina Salazar-Barnes.

For questions about APs, please contact [Mel Burnett](#) at 667-1895. For training questions, contact [Yolanda Trujillo](#) at 665-5696.

### **CGD TAGS AND QUALIFIED PREPARERS**

Commercial Grade Dedication tags (pending and complete) are stocked by Christina Salazar-Barnes for the nuclear facilities, but for the TA-55 FOD and related nuclear projects, Erin Blue is now the primary POC for tags.

Also, per several emails from Mike Brazile, the revision of the CGD AP necessitated new training, and so now only those that have passed 30727, CGD Preparers' Training, are qualified to perform this work.

Mike also notes that Courses 30726, Commercial Grade Dedication Overview and 30727, Commercial Grade Dedication Preparers' training, are being offered **January 28 at TA-00, Building 1308 (White Rock Training Center), Room 165 from 8 a.m. to 5:00 p.m.**

Course 30726, CGD Overview, is intended for those workers who need a high level overview of the process. It's facilitated from 8:00 a.m. to 11:00 a.m., while the CGD Preparers' course is facilitated from 11 a.m. to 5:00 p.m.

You can register for this training yourself (similar method to EE course above).

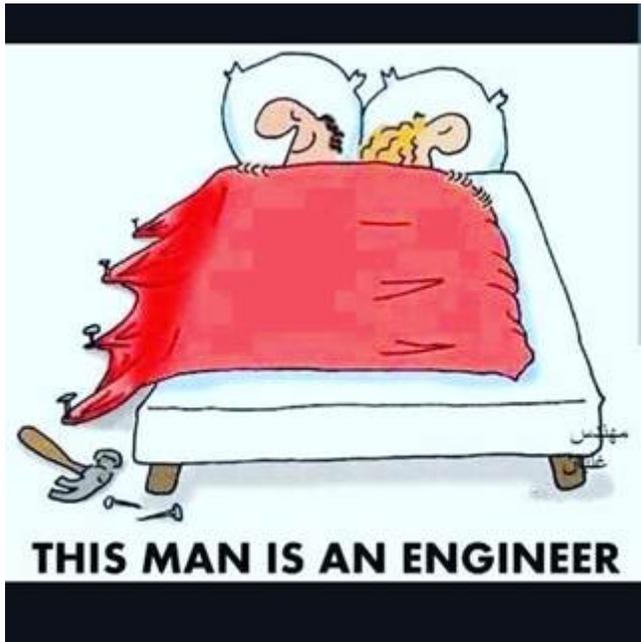
If you have questions or concerns regarding anything above please contact Bill Kerley, ESD DDL at 667-6495; Marshall Bullock, Procurement Engineer Lead at 667-4976; or Mike Brazile, Training Specialist in support of ESD Training, at 665-8258.

### **DOE TECHNICAL STANDARDS ACTIONS**

DOE Tech [Stds](#) activity in the past month: None.

## **WHEN GOOD CONDUCT OF ENGINEERING ISN'T FOLLOWED**

Or rather, when engineers' conduct crosses the line.



### **LAST MONTH'S UPDATE TOPICS**

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

- **IBC Program Graded Approach Streamlined**
- **IHS Online Standards Changes**
- **Ethics for Engineers**
- **LANL Standards Issued in November**
- **Engineering Process Changes**
- **Environmental Remediation Desk Instruction**
- **DOE Technical Standards Actions**
- **When Good Conduct of Engineering Isn't Followed**

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