

ENGINEERING STANDARDS UPDATE

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

Topics this month:

- **Ethics and Engineers Behaving Badly**
- **Twelve Days of Code Lyrics**
- **LANL Standards Issued in November**
- **DOE Technical Standards Actions**
- **When Good Conduct of Engineering Isn't Followed**

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

ETHICS AND ENGINEERS BEHAVING BADLY

For the professional engineers: In December I normally write about ethics-related professional development opportunities before the year-end deadline for half the NM PEs. For one PDH hour, Heidi Hahn is finalizing her popular (aka free) Engineering Ethics Case Studies 2013; check UTrain for course #23247 later next week or so when taking the workplace violence course you also put off. For the three other hours, however, [NMSPE](#) seems to have abandoned their pricey live and online offerings – this after driving the requirement in the Engineering Act's rules in the first place -- so you'll have to go outside NM.

One doesn't need to be a PE to have ethics. Here's an ethical question to ponder, and it's not about a crappy lunch from a vendor (which is OK unless it influences you beyond indigestion):

Is it ethical to design a drug smuggling tunnel if it's your job and you do it well (see below)?

My answer: No, that kind of defense also failed the Nazi camp guards. Also, the NM Act's [Rules](#) of Professional Conduct (16.39.8.9) say: "Refuse to associate in a business venture with any person or firm which they may have reason to believe is engaging in fraudulent or dishonest business..."

Are Engineers Behind Drug Smuggling Super Tunnel? (sourceable.net)

A drug smuggling "super tunnel" discovered by US officials is so sophisticated authorities have suggested that cartels have engineers and architects on the payroll. Read more [here](#).



Drug tunnel

(Drug Enforcement Administration)

The 755-foot passageway is tall enough for a 6-foot person to walk through and is outfitted with lights, fans and a ventilation system.

As IBC Program Chapter POC, I love this:



TWELVE DAYS OF CODE LYRICS

Sure, there's some bureaucracy with IBC construction here, but it's actually less than outside of LANL -- at least the LANL Building Official (Larry Goen) and his CM-CE virtual inspectors also represent the owner and we don't deal with insurers or boards. Nevertheless, here's some humor from a code forum (by David Bartley with minor edits):

"In our office, at 12:12, we'll be joining in with the online movement in singing "The 12 Days of Christmas," but we made a few tweaks that I thought this group might appreciate:

- 12 Code officials officiating
- 11 Boards a ruling
- 10 Contractors appealing
- 9 Inspectors inspecting
- 8 Owners squawking
- 7 Insurers hesitating
- 6 Accountants counting
- 5 ICC codes
- 4 State amendments
- 3 Jurisdictions
- 2 New interns
- ...and a client who changes his mind!"

LANL STANDARDS ISSUED IN NOVEMBER

Eng Standards Manual [STD-342-100](#)

Chapter/Section	Summary of Changes
Chapter 2, Fire Protection (Section D40)	Incorporated DOE O 420.1C and DOE-STD-1066-12; commissioning expectations. Other minor changes.
Chapter 13, Welding, Joining, & NDE; Vol.6 Welding Inspection & General NDE	
WIGN 6-01 Rev. 1, Welding Inspector Qualification	para 5.1.B added J2 to vision requirement
WIGN 6-02 Rev. 1, NDE Inspector Qualification	para 5.1.B added J2 to vision requirement and para. 5.2.G added AWS-CWI & AWS-SCWI = VT Level II
WIGN 6-02, Attachment 3 Rev. 2, Written Practice for NDE Personnel Qualification & Certification	Added AWS-CWI & AWS-SCWI=VT Level II & added VT hours of Training to Table I & VT Examination Questions to Table II
Procedure ITM-1306-NDE-VT-101 Rev. 0, Visual & Dimensional Inspection	Initial issue. Replaces blue sheeted KSL procedure same topic.

A better month than last; we've mostly recovered from the [\\$24B](#) shutdown churn and are hard at work again finalizing the Pressure Safety chapter and making other revisions before the next [crisis](#).

BTW, looking up the saying "A billion here, a billion there, pretty soon, you're talking real money," I found it's an embellishment of Everett Dirksen (R-III), 1896-1969. Wikiquote says: 'Although often quoted, it seems Dirksen never actually said this. The Dirksen Congressional Research Center made [an extensive search](#) when fully 25% of enquiries to them were about the quotation. They could find Dirksen did say "a billion here, a billion there", and things close to that, but not the "pretty soon you're talking real money" part. They had one gentleman report to them he had asked Dirksen about it on an airlight and received the reply: "Oh, I never said that. A newspaper fella misquoted me once, and I thought it sounded so good that I never bothered to deny it."

DOE TECHNICAL STANDARDS ACTIONS

DOE [Tech Stds](#) activity this past month:

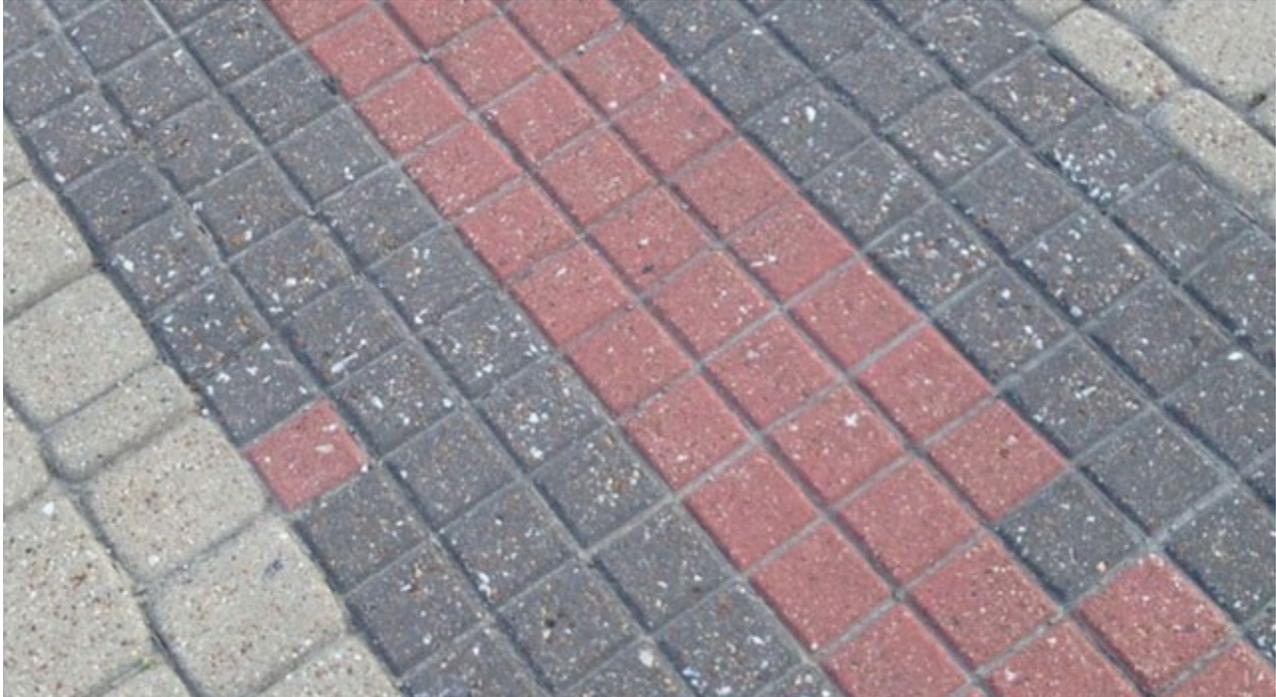
DOE-STD-1121-2008 CN 1, Internal Dosimetry

DOE-STD-1174-2013, Radiation Protection Functional Area Qualification Standard [for Feds/info]

DOE-STD-1628-2013, Development of Probabilistic Risk Assessments for Nuclear Safety Applications

WHEN GOOD CONDUCT OF ENGINEERING ISN'T FOLLOWED

Or is it conduct of architecture? The first photo below came from Lyle Kerstiens (retired). The thread called it an installer goof, I actually think it's some architect's or interior designer's intentional desire to add interest – not unlike the missing window on the back of the NSSB's fifth floor in the second photo.





LAST MONTH'S UPDATE TOPICS

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

- **Free Standards: IBR Portal, etc.**
- **Concrete Anchor & Firestopping Seminars**
- **Nuclear Workers Behaving Badly**
- **LANL Standards Issued in October**
- **Processes Changes**
- **DOE Technical Standards Actions**
- **When Good Conduct of Engineering Isn't Followed**

To request a change to this newsletter's distribution, please contact me.

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