

ENGINEERING STANDARDS UPDATE
Trying to Make Standards Exciting Since 2001

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:

- **Standards Spotlight – STR Authority**
- **Electrical Standards POC Change**
- **IHS Online National Standards Changes for 2012**
- **CoE for R&D**
- **CoE Quote**
- **LANL Standards Issued in December**
- **DOE Technical Standards Actions**
- **When Good Conduct of Engineering Isn't Followed**

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

STANDARDS SPOTLIGHT – STR AUTHORITY

December wasn't a cold month for the Standards, as it brought some heated discussion about the authority given the LANL Subcontractor Technical Representative in a certain spec. Specifically, it was the Master Specification on earth moving, which at one point states: "Do not place and compact backfill material when the atmospheric temperature is below 35 degrees F, unless approved by STR."

Often, the intent of statements such as this concerning STRs is to inform users that some latitude might be allowed by various mandatory codes and standards in a given situation. Specs should not empower STRs to make technical decisions that should be made by engineering, but trigger engineering involvement so as to reach the right outcome. (Ultimately, this particular spec's wording isn't great, and will be revised).

Now -- is it getting warm again, or is it just my Outlook inbox filling with hate mail?

ELECTRICAL STANDARDS POC CHANGE

With the retirement of David Powell in December, Joseph Sanchez has assumed the position of Electrical POC (ESM Ch 7 etc.). Joseph is the ES-DE Electrical Team Leader and was formerly the alternate POC. As one might expect, David worked hard even on his last day, so expect a couple of spec revisions soon.

IHS ONLINE NATIONAL STANDARDS CHANGES FOR 2012

Per Carol Hoover, the only change planned for LANL's 2012 subscription [service](#) is that the Research Library is dropping the TIA telecom wiring standards early this year due to low usage. So, if you're installing cabling per TIA 568, 569, or 606 per ESM Ch 7 Section D5030 Communications in the near future, you should download these standards in the next few days. After that, contact Joseph Sanchez, NIE-1 (e.g., Pete Lowe), or me about borrowing.

COE FOR R&D

A few readers commented on this announcement in the 12/13 LANLtoday:

“Provisional Procedure P 341-1 Conduct of Engineering Processes for R&D – Cancelled

This document was issued as ‘provisional’ on September 19, 2011, and was scheduled to become effective on December 16, 2011. However this document is cancelled because of concerns raised by the Laboratory's engineering community.”

The concept is being reworked and will return in a few months.

COE QUOTE

A good scientist is a person with original ideas. A good engineer is a person who makes a design that works with as few original ideas as possible. There are no prima donnas in engineering.

[Freeman Dyson](#)

LANL STANDARDS ISSUED IN DECEMBER

Master Specifications [STD-342-200](#)

05 1000 Rev. 3 Structural Metal Framing	Clarified EOR requirements for AISC 341 QA plan (1.4) and erection plan (3.3), other minor changes.
26 3334 Rev. 0 Stored Emergency Power Supply System	Initial Issue [NEW!]
Updated Exhibit I input template (link is atop the specs page)	

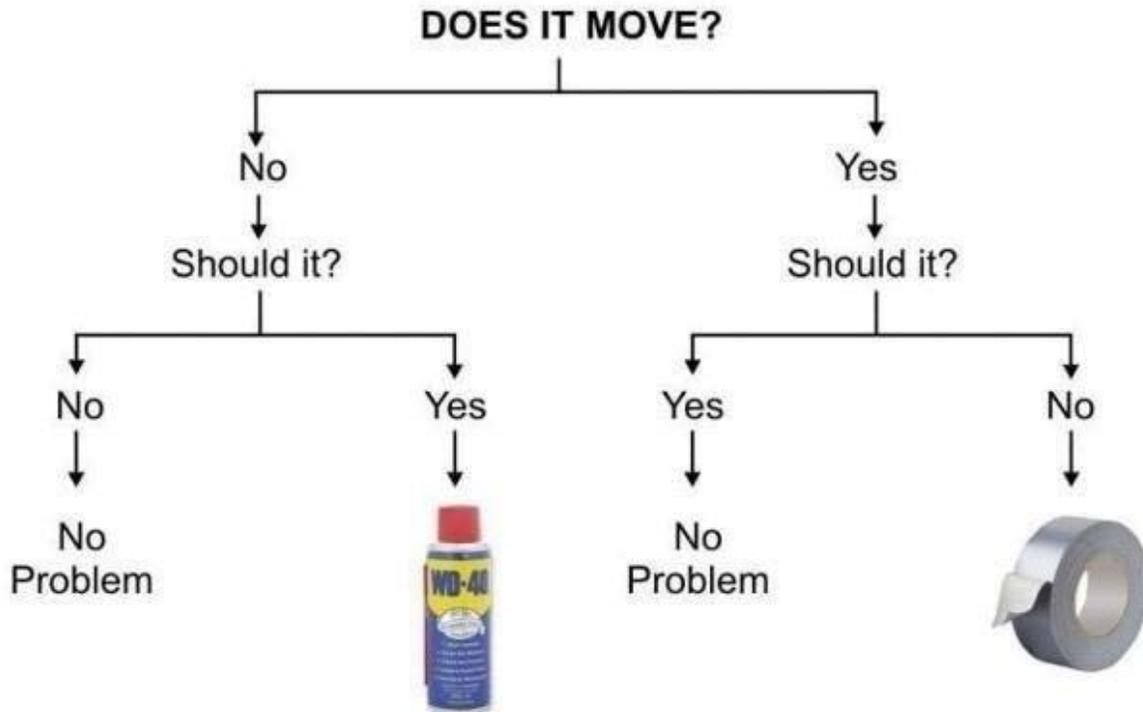
DOE TECHNICAL STANDARDS ACTIONS

New or revised DOE [Tech Stds](#) this past month: None

WHEN CONDUCT OF ENGINEERING ISN'T FOLLOWED

Many thanks to Rex Crook for forwarding this month's levity.

Engineering Flowchart



LAST MONTH'S UPDATE TOPICS

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

- **Engineering Processes Changes**
- **CoE Quote**
- **LANL Standards Issued in November**
- **DOE Technical Standards Actions**
- **When Good Conduct of Engineering Isn't Followed**
- **Standards Spotlight – Cross Connection Control**

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

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