

ENGINEERING STANDARDS UPDATE

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

Topics this month:

- **USG Seismic Ceiling Seminar Tues, Sept 9**
- **DOE O 420.1C Implementation**
- **Nuclear Workers Behaving Badly**
- **National Standard Committee Participation**
- **LANL Standards Issued in August**
- **Engineering Processes**
- **DOE Technical Standards Actions**
- **When Good Conduct of Engineering Isn't Followed**

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

USG SEISMIC CEILING SEMINAR TUES, SEPT 9

This seminar runs from 11:30 – 1 PM at Canyon Complex Room 164, box lunch provided. It may still be possible for a few more designers, engineers, installers, and inspectors to attend; contact Architectural POC David Carr dcarr@lanl.gov to express interest.

DOE O 420.1C IMPLEMENTATION

This Facility Safety order is in our contract and will become the code of record for the design of all new facilities and major modifications to nuclear facilities (substantial change to safety basis per [SBP114-1](#)) by March 31, 2015. Most of the affected Engineering Standards Manual chapters are being revised this month to support this (Chapters 6-8, 10, 12, and 17; Ch. 2 already revised). The remaining chapter (5 - Structural) will reference and implement 420.1C by March.

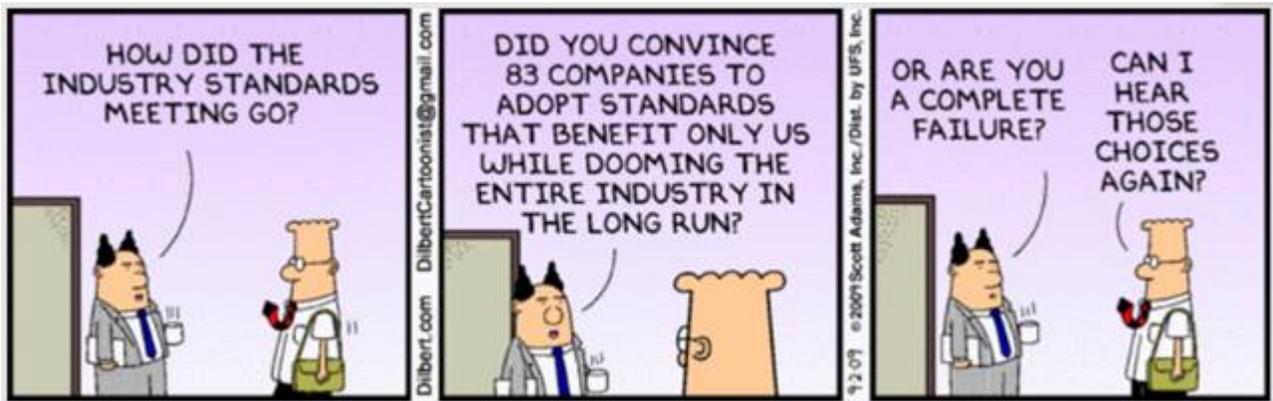
NUCLEAR WORKERS BEHAVING BADLY

Washington - At least 34 sailors are being kicked out of the Navy for their roles in a cheating ring that operated undetected for at least seven years at a nuclear power training site, and 10 others are under criminal investigation, the admiral in charge of the Navy's nuclear reactors program told The Associated Press...[more](#) (CBS)

NATIONAL STANDARD COMMITTEE PARTICIPATION

If you're a Lab employee serving on a committee maintaining or writing a national code or standard that I'm not aware of, please contact me. About 48 employees do such committee work which we must report to DOE-HQ per the contract. Examples are ASME, ASTM, NFPA, etc. Already on the list:

Mark C. Anderson Russell B. Bainbridge III Michael E. Bange William A. Bearden Ramona Biggs Sherri A. Bingert David A. Bingham Kelly L. Bingham David W. Bowman Lowell T. Christensen Robert F. Daley Donald J. Dudziak David A. Fry David P. Fuehne Milan S. Gadd George M. Hrbek	Rick Hinckley Patrick W. Hochanadel Daniel A. Javernick Alan L. Justus Douglas D. Kautz Larry T. Lamsa Paul O. Leslie Sheila A. Lott Michael W. Mallett Alexander A. Martinez Thomas D. McLean Murray E. Moore William L. Myers Connon R. Odom Gene N. Ortega Glen J. Pappas	Donivan R. Porterfield Christopher Romero Mark S. Rosenberger Scott R. Salisbury Michael W. Salmon Thomas E. Sampson Magda Serrano de Caro James K. Sprinkle James R. Streit A. Ben Swartz Thomas E. Tierney Leah A. Tietjen Taunia S. Van Valkenburg Tom L. Waters Joni L. Weamer Jeffrey J. Whicker
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LANL STANDARDS ISSUED IN AUGUST

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

Exhibit I Att B template – added concurrent review for existing pressure safety submittals in LANL masters.

ENGINEERING PROCESSES

The recently approved AP-341-802-R4 System Health Reporting has been removed from SharePoint while we revise the procedure. Revision 4 will be re-issued at a later date, and notification will be sent when it is reposted.

The following Administrative Procedures were posted on the Conduct of Engineering Office, [Engineering Processes](#) page in SharePoint. Please refer to the notification on this for instructions on training and implementation.

AP-341-514-R0 NEW!	Functionality Assessment Course 26438	Issued: 8/11/14
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DOE TECHNICAL STANDARDS ACTIONS

DOE Tech [Stds](#) activity this past month: none

WHEN GOOD CONDUCT OF ENGINEERING ISN'T FOLLOWED

Thanks to Jerry Gutsell for this.

A toothpaste factory had a problem. They sometimes shipped empty boxes without the tube inside. This challenged their perceived quality with the buyers and distributors.

Understanding how important the relationship with them was, the CEO of the company assembled his top people. They decided to hire an external engineering company to solve their empty boxes problem. The project followed the usual process: budget and project sponsor allocated, RFP, and third-parties selected. Six months (and \$8 million) later they had a fantastic solution - on time, on budget, and high quality. Everyone in the project was pleased.

They solved the problem by using a high-tech precision scale that would sound a bell and flash lights whenever a toothpaste box weighed less than it should. The line would stop, someone would walk over, remove the defective box, and then press another button to re-start the line. As a result of the new package monitoring process, no empty boxes were being shipped out of the factory.

With no more customer complaints, the CEO felt the \$8 million was well spent. He then reviewed the line statistics report and discovered the number of empty boxes picked up by the scale in the first week was consistent with projections, however, the next three weeks was zero! The rate should have been at least a dozen boxes a day. He had the engineers check the equipment, they verified the report as accurate.

Puzzled, the CEO traveled down to the factory, viewed the part of the line where the precision scale was installed, and observed just ahead of the new \$8 million dollar solution sat a \$20 desk fan blowing the empty boxes off the belt and into a bin. He asked the line supervisor what that was about.

"Oh, that," the supervisor replied, "Bert, the kid from maintenance, put it there because he was tired of walking over, removing the box and re-starting the line every time the bell rang.

[Over-engineering isn't good CoE]

LAST MONTH'S UPDATE TOPICS

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

- **Some Electrical Tips**
- **LANL Standards Issued in July**
- **Engineering Processes**
- **DOE Technical Standards Actions**
- **When Good Conduct of Engineering Isn't Followed**

To request a change to this newsletter's distribution, please contact me.
The views expressed in this email are not necessarily those of my employer.

Tobin Oruch, Engineering Standards Mgr
Los Alamos Nat'l Lab, Conduct of Eng Program Office
TA-03-0216 M/S F696 ph (505) 665-8475
oruch@lanl.gov <http://engstandards.lanl.gov/>

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