

ENGINEERING STANDARDS UPDATE

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

Topics this month:

- **Engineering Processes**
- **Standards Hero**
- **CGD Training**
- **Swagelok Seminars**
- **Engineers Behaving Badly**
- **Engineers Behaving Well**
- **LANL Standards Issued in June**
- **DOE Technical Standards Actions**
- **When Good Conduct of Engineering Isn't Followed**

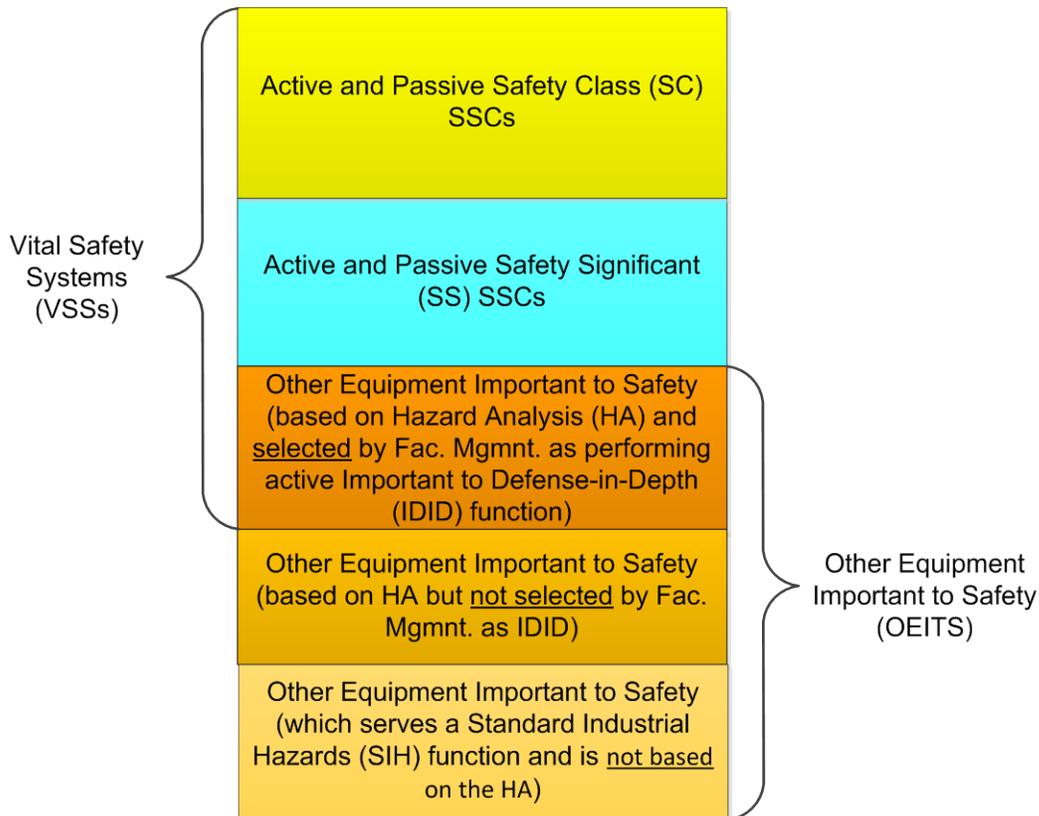
The Standards Homepage: <http://engstandards.lanl.gov/>

ENGINEERING PROCESSES

This month, Processes gets top billing. That's because Gurinder Grewal's retiring this Friday, July 11. He's done a fantastic job building the AP set, SharePoint-based DCFs, and all the other process-related parts of CoE over the past decade or so. He will be missed tremendously.

Gurinder's been an engineer for 45 years, the last 40 years at DOE sites (Idaho Falls, Hanford, Portsmouth, Oak Ridge, Fernald) – with the last 15 years at Los Alamos. Stop by and wish Gurinder a happy retirement and enjoy some cake on Wednesday, July 9 from 1:30-2:15 p.m. in the Rocky Road Conference Room at TA-00-0726. Or email or call: [Gurinder Grewal](mailto:Gurinder.Grewal@lanl.gov); 7-3667.

He's a humble guy, so would want me to get back to work matters now. So...last month's Processes article provided the a VSS graphic from the just-revised AP-341-101, Designating Vital Safety Systems and Cognizant System Engineers. Below is a larger graphic showing what constitutes OEITS also (from the pending P341 revision):



STANDARDS HERO

This month I'm saying thanks to Gary Exner in ES-EPD. Gary routinely makes specific, helpful suggestions on the improvement of various LANL Engineering Standards. There are a few other people that also do this (you're appreciated, too). We wish more people took the time to email us with their good ideas.

CGD TRAINING

If you're an engineer in a nuclear facility and therefore might need to develop commercial grade dedication packages, you need Course 18168 to be qualified to do so. If you haven't had it, get on the waitlist for a Fall session through Yolanda J. Trujillo, yitrujillo@lanl.gov, 665-5696.

SWAGELOK SEMINARS

Randy Huggard, Account Manager for Swagelok Southwest (Arizona/Albuquerque Valve & Fitting Corp.) sent this:

Free Swagelok seminars will be held at the Holiday Inn Express (60 Entrada Drive) on July 9th and 10th. You can attend either day (same material will be presented) and any or all of the classes you

want. These seminars are designed for all levels of experience and include hands on learning which will help to ensure trouble-free system performance. Breakfast and lunch provided.

Topics/Times:

8am-10am: Swagelok Safety Installation Seminar for Fittings and VCR, Thread Identification.

10am-11am: Swagelok Valve Selection & Safety Installation Seminar

11am-12 pm: Swagelok Regulator Safety & Selection Seminar

12pm-1pm: Lunch

1pm-2pm: Swagelok Hose Safety & Installation Seminar

2pm-3:30pm: Swagelok Tube Bending Seminar

To attend, contact randy.huggard@swagelok.com or cell (505)379-7300.

ENGINEERS BEHAVING BADLY

The buck stops with the architect, but it's the engineering consultant that's the surely the problem. **Calatrava ordered to pay millions for 'shortcomings in his work' on conference center project**

Famed architect Santiago Calatrava must pay 2.9 million euros due to faulty design work on the Palacio de Congresos project in Oviedo, Spain.

BD+C Staff, February 21, 2014



The building's owner says the structure's mechanical visor has never worked because of problems with its hydraulics.

A Spanish court [ruled](#) that famed architect Santiago Calatrava must pay 2.9 million euros (roughly \$4 million) to a property development company, citing "shortcomings in his work" related to the [Palacio de Congresos](#) project in Oviedo, Spain, according to the Associated Press.

According to a report from [The Guardian](#), Palacio de Congresos' infamous, huge mechanical visor has never worked because of problems with its hydraulics. Calatrava has been in an ongoing battle with the building's owners through the courts after they blamed him and refused to pay his full fees. The architect is facing legal action in his home town, as well. As BD+C [reported](#) in December 2013, officials with the city of Valencia, Spain, are blaming Calatrava for the rapid deterioration of buildings within its City of Arts and Sciences complex.

And the owner of another Calatrava-designed project, Ysios winery in the rainy Alava region of northern Spain, [say the building's dramatic, undulating roof is leaking](#).

ENGINEERS BEHAVING WELL

[The Most Amazing Construction Projects](#)

Over time it is amazing to see what man has been able to create. Large construction projects leave us in awe of how the builders brought everything together. All the work, effort and coordination it took to make these projects happen make us wonder how such undertakings ever took place.

What are some of the most amazing construction projects in existence today? Rock & Dirt, a heavy equipment marketplace, has put together an infographic that highlights some of the top construction projects still around today. From the Great Pyramids of Giza to the US Interstate Highway System, this infographic outlines interesting facts about these projects with great visual representations. There are also a few amazing construction projects that made the list that you might not be aware of. Check it out to find out more. Enjoy!

LANL STANDARDS ISSUED IN JUNE

It's a great day when we expand the collection of useful Standard Details, so this is a great day!

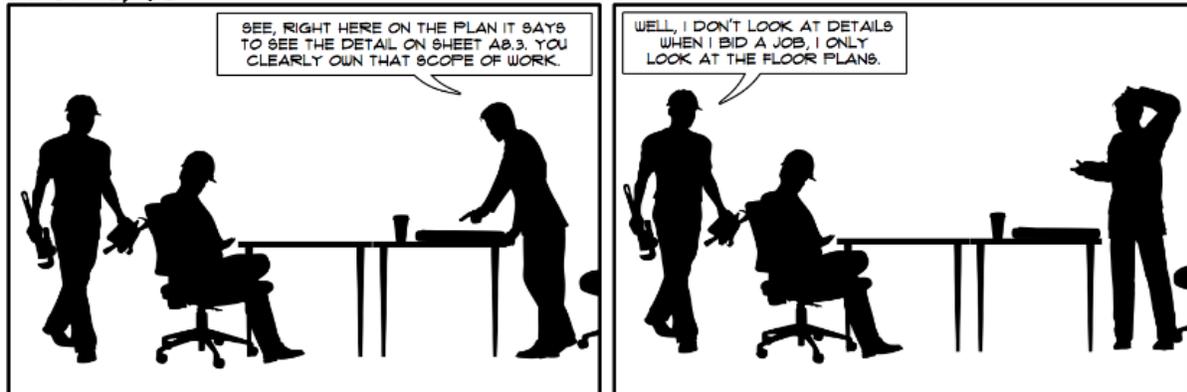
[Standard Drawings & Details](#) STD-342-400

[Structural](#)

ST-F1033-1 thru -4 Wall-Mounted Equipment Details, Rev. 0 NEW!!!!

CONSTRUCTION ADMINISTRATION: DETAILS

ARCHITEXTS



DOE TECHNICAL STANDARDS ACTIONS

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

[DOE-HDBK-1078-94](#), Training Program Handbook: A Systematic Approach to Training, Reaffirmed June 2014

[DOE-HDBK-1211-2014](#), Activity-Level Work Planning and Control Implementation (New)

Canceled and recently deleted from [Tech Stds](#) website:

DOE-STD-1134-99 Review Guide For Criticality Safety Evaluations

DOE-HDBK-1148 Work Smart Standards (WSS) Users Handbook

DOE-STD-6005-1 Industrial Hygiene Practices

WHEN GOOD CONDUCT OF ENGINEERING ISN'T FOLLOWED

Thanks to frequent-contributor Anthony Cuaron for this one.

[Lessons Learned: Incorrect 'as-built' drawings lead to discovery of unexpected energy source during circuit replacement \(Oak Ridge\) \(pdf\)](#)

LAST MONTH'S UPDATE TOPICS

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

- **Mechanical Standards POC**
- **Get it Right the First Time with Project Determination Form**
- **Electrical Standards Course July 2**
- **Engineers Behaving Badly**
- **Engineers Behaving Well**
- **LANL Standards Issued in May**
- **Engineering Processes Changes**
- **DOE Technical Standards Actions**
- **Suspect/Counterfeit Items Course this Week**
- **When Good Conduct of Engineering Isn't Followed**

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

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