

This is the monthly newsletter of the LANL Engineering Standards Program. The Standards are mandatory documents that define the minimum design criteria, fabrication, and installation practices for the design, repair, and alteration of LANL facilities and the programmatic equipment within them. [[IMP 342](#)]

Topics this month:

- **Whatzup with WSS?**
- **New Structural Courses Available**
- **Welding Database Upgrade**
- **Spec Numbering and Filling the Gaps**
- **LANL Standards Issued in June**
- **DOE Standard Actions**

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

WHATZUP WITH WSS?

The Work Smart Standards were a set of environment, safety, and health Directives and Standards in the UC/DOE contract's Appendix G, List of Directives. The LANS contract's Appendix G no longer includes the WSS subset, but does have a number of ES&H-related Directives (the [RFP's](#) App G is said to be unchanged in the actual Contract). Also, the new [10CFR851](#) Worker Safety and Health Program Rule is bringing a number of national standards into the compliance picture. Still, the net effect is a reduction in the number of contractual documents and a greater reliance on LANL self-invoking national standards and other best commercial practices. This is done through the LANL policy and procedure system that includes IMPs, ISDs, and LIRs. Moreover, the LANL Engineering Standards ISDs will change little as a result of the WSS departure; the former WSS standards that the ESM invokes are appropriate and will continue to be invoked; only some bases (e.g., footnotes) will need to change.

NEW STRUCTURAL COURSES AVAILABLE

Following the revision of the Engineering Standards Manual's Structural Chapter, an updated and improved introductory course on the Chapter as well as a brand-new advanced course on design using that chapter are now available.

Course [31876](#), ESM Intro to the Structural Requirements is scheduled for August 10 from 8-12.

This is recommended for project managers, structural engineers and other engineers and designers dealing with anchorage and bracing, safety analysts, and others who may be interested.

Course [31875](#), ESM Application of Structural Requirements is an 8-hour class starting Sept 20 from 1-5 and concluding Sept 21 from 8-12.

It provides an in-depth treatment of the technical requirements in Engineering Standards Manual Chapter 5, Structural. Attendees should already be familiar with the Chapter's contents and concepts (prior completion of Course 31876 highly recommended). Example problems will be

worked on by class attendees followed by discussion with the instructors. Attendees should bring a calculator.

Both classes are to be presented by Structural POC Mike Salmon and consultant Steve Short in White Rock. Enroll through CT-ESH using links above, call 7-0059, or e-mail esh-registration@lanl.gov

WELDING DATABASE UPGRADE

To weld onsite -- whether LANS, KSL, or subcontractor -- one must be certified by LANL under the LANL Welding Program (ESM Chapter 13). The Welder Qualification Database shows those individuals' certifications and tracks their welding activity (welding with a process at least semi-annually is necessary to maintain certification).

Those accessing the database will see expanded data on the welders' limits of qualification, and certification data is now real-time owing to the new online data entry capability. The new database was developed under LANL's software QA program. Thanks go to developer Kay Jackson, Cindy Martin regarding SQA and data migration QA, and Welding POC Kelly Bingham for leading.

The old database webpage redirects to the new, but bookmarks and referring webpages should be updated to <http://zirk/weldersdb/engstandard.aspx>

SPEC NUMBERING AND FILLING THE GAPS

By now many who use the LANL Master Specifications have adjusted to the new organization that uses about 25 of the 50 divisions in the new CSI MasterFormat system. Most use the crosswalks on the Specs website to determine the new spec number based on the old, or visa-versa. Others navigate the page to the new division and find the spec (often has a new title) for what they need. Experts have even found the old specs archived on the History page.

That's all fine for the topics for which LANL has a master, but what about when we don't? Just as before, design teams are responsible for producing a complete design package including all necessary specs, so if LANL doesn't have a spec that's needed then it must be created for the project (ref. ESM Chapter 1 Sect. Z10). There are many sources of "go-by" specs including the internet and past projects. LANL even has access to the AIA/ARCOM MasterSpec set of commercial, generic masters (contact me or the POCs).

The final step in creating these project-specific, other-than-LANL-Master specs is to number and title them. That involves choosing the best number/title combination from the complete MasterFormat 2004 Numbers and Titles [listing](#). When the listing's "canned" offerings won't serve, authors must create a user-defined number and title that fits into the MF04 scheme. More detail on number selection is in the complete MF04 document available from CSI, Tobin Oruch, or David Powell.

LANL STANDARDS ISSUED IN JUNE

LANL Master Specifications Manual ISD 342-2

03 3001 R1 Reinforced Concrete. To improve supplied concrete quality, added design mixes from LATM, and incorporated lessons learned from field inspections based on findings from recent PS-1 surveillances

DOE STANDARD ACTIONS <http://www.eh.doe.gov/techstds/standard/index.html>

Changes this month:

DOE-HDBK-1139/1-2006, *Chemical Management, Volume 1 of 3*. Revised.

Above URL will take you to the "DOE Technical Standards Full-Text Documents." Clicking on "Approved Standards" or "Recently Approved" on the left margin takes you to the Standards.

To request a change to this newsletter's distribution contact Tobin Oruch, oruch@lanl.gov.

Previous issues of this Update are available; click "Monthly Update" below the Google search on the Standards homepage <http://engstandards.lanl.gov/>

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