

Construction News Sense



See page 2 for *Noise Exposure: An Assault on the Ears (Part 2)*.



After the Audit

I wanted to follow up with everyone on the results of the HS-064 audit I mentioned in the January Construction News Sense. The audit process involved watching many of you perform your work, and as Yogi Berra once said, "You can observe a lot by just watching." The feedback we have received from all of that watching is another reason why I'm so proud of our construction community. All personnel were polite, cooperative, knowledgeable and conducted themselves in a professional manner. In the auditors' words, "workers demonstrated a good understanding of ES&H requirements and a willingness to follow them." The auditors determined that we have improved our ES&H processes since they last visited in 2005. They focused on and were pleased with the pre-job briefings that contractors were performing, saying, "Documented Task Hazard Analyses are used by most subcontractors to remind workers of applicable controls before they begin work each day."

Our final score was subdivided into categories -- "Define Scope of Work", "Analyze Hazards", "Develop and Implement Controls" and "Perform Work within Controls." We were graded based on green (effective performance), yellow (needs improvement) and red (significant weakness). Our score in order by category was green, yellow, green, green. A job very well done to all of the people in our construction community who made this possible.

After some well deserved high fives, and pats on backs, we need to focus on our next challenge. I think it was Vince Lombardi, when asked how long one should savor a big victory before thinking about the next opponent, who replied, "How long does it take to walk to the tunnel?"

When it comes to the safety of the members of our community, our target is zero injuries; we will never be satisfied until no one ever gets hurt on our con-

struction sites. Realistically, this means we will never be done improving, and we will never be satisfied with the status quo. The auditors gave us some ideas for improvement that we need to consider. They focused many of their suggestions on the Contract Specific Safety Plans (CSSPs). Their suggestions included establishing better:

- hazards descriptions (e.g., welding fumes can cause cancer and Parkinson's disease);
- defined Lockout – Tagout processes;
- information for workers regarding arc flash hazards; and
- knowledge on Sandia's part of the chemicals contractors are bringing on site.

Pre-task planning was very important to the auditors; they liked what they saw but felt more structure and consistency was needed around the elements of the morning meetings. They suggested including MSDS information for chemicals that may be used that day and providing greater superintendent involvement. They felt we communicate physical hazards well but still had some work to do to communicate health hazards to workers. We will be working together to address the auditors' findings and other ways we can improve.

In closing, before we reach the tunnel, I want to take this opportunity to thank everyone in our community on behalf of the entire Sandia management team. Expectations are always very high for this community, and each new challenge has been met with energy and teamwork. I could not be more proud to be a part of it.

John Norwalk, Org 04827

Noise Exposure: An Assault on the Ears (Part 2 of 3)

In the February 2008 issue of *Construction News Sense*, we looked at noise and how it can affect your hearing. This month, we take a closer look at noise at the construction site.

Will noise standards or regulations be exceeded?

There are many situations, tools, tasks, and work areas on construction sites that may result in noise exposures at or above 85 decibels (dBA).

The general belief is that the duration and frequency of use of equipment is not sufficient to result in an exposure that exceeds the threshold limit value (TLV) of 85 dBA. This could be true in some instances; however, construction workers are exposed to continuous, intermittent, or impulse noise levels that are resulting in hearing loss.

It is common that the TLV for noise exposure is exceeded for construction workers. The higher the noise levels, the shorter the period of time you can be exposed before exceeding the TLV. For example, in a recent monitoring event, a worker operating a concrete saw for 37 minutes out of an 8-hour work shift exceeded the 8-hour time-weighted average of 85 dBA. If a piece of equipment operates at 100 dBA, you only have to operate the equipment 15 minutes out of an 8-hour day to exceed the TLV. If you use a piece of equipment that operates at 115 dBA, your exposure time is 30 seconds or less before exceeding the TLV. Therefore, just because a piece of noisy equipment is only used for a short duration does not necessarily mean your hearing is protected.

What are typical sources of construction noise exposure?

The table to the right lists probable sound levels produced by tools or equipment (American National Standards Institute (ANSI) and American Society of Safety Engineers (ASSE) standard, *ANSI/ASSE A10.46-2007, Hearing Loss Prevention for Construction and Demolition Workers*).

Next month, we will look at ways to prevent noise-induced hearing loss.

Diane Morrell, Org. 04127

Quarterly Construction Contractor Safety Seminar

April 8, 2008

2:00 - 4:00 pm

Mountain View Club



| Tool | Noise level will probably exceed (dBA) |
|--------------------------------------|--|
| Air gun | 108 |
| Air hammer | 110 |
| Air track drill | 110 |
| Asphalt grinder | 111 |
| Backhoe | 85 |
| Belt sander | 90 |
| Brick saw | 94 |
| Bulldozer | 87 |
| Chipper – pneumatic | 100 |
| Chipping gun | 96 |
| Chopsaw | 92 |
| Circular saw | 88 |
| Compactor | 90 |
| Compressed air gun | 104 |
| Compressor (silenced) at 7 meters | 70 |
| Compressor (standard) at 7 meters | 77 |
| Concrete mixer truck at 15 meters | 75 |
| Concrete pump at 15 meters | 81 |
| Concrete saw | 98 |
| Concrete vibrator | 90 |
| Cutoff saw | 98 |
| Double scraper | 92 |
| Drill | 87 |
| Dump truck | 78 |
| Electric grinder | 98 |
| Excavator | 80 |
| Forklift | 93 |
| Framing saw | 82 |
| Front end loader | 90 |
| Grader/scraper | 72 |
| Grinder | 87 |
| Jackhammer | 102 |
| Jigsaw | 91 |
| Mechanical tamper | 90 |
| Motorized wheel barrow | 86 |
| Nailgun | 97 |
| Paver at 15 meters | 86 |
| Portable hand held band saw | 83 |
| Portable welder – type not specified | 84 |
| Powder actuated tool | 89 |
| Reciprocating saw | 86 |
| Road grader | 95 |
| Rotomhammer | 84 |
| Router | 90 |
| Scraper | 105 |
| Screw gun | 86 |
| Stud welder | 101 |
| Welding equipment – not specified | 92 |