



3/26/19

Submittal for NAXSA newsletter and website publication

**Registered Professional Engineer, Tabulated Data, and Interstate Commerce**

At the most recent NAXSA convention, February 27 thru March 1, there was a discussion about the validity of tabulated data and the engineers stamp. There were a couple of specific questions that were asked. These two questions have been common within our industry since the adoption of OSHA Subpart P since it was adopted at the end of 1989. The comments here are intended to help clarify these issues.

**Engineers Stamp Expiration Date**

1. If the engineers stamp on the tabulated data has expired, or there is no expiration date, is the tabulated data no longer valid?
  - The validity of the structural calculations and conclusions would not change when the engineering stamp expires. The shoring equipment should be as strong and safe as it was the day it was delivered from the factory. If there was a shelf life for the equipment it should be listed in the tabulated data.
  - Currently the trend in most states is to not put an expiration date on the engineer's stamp because it should not affect the validity of the underlying work. There is a requirement that the date that the data was stamped and signed be on the document. Due to the fact that codes and material design standards change over time it has also become common practice for engineers to require the manufacturer to allow them to review and recertify (place a new signed date), the tabulated data after a certain period of time.
  - The way to find out if the stamp has expired is to check with the state licensing board where it was issued from. Stamps usually expire every two years and the can also be revoked at any time.
  - If the stamp has expired it makes it slightly more complicated to litigate based on the data, however: the engineer is still responsible for his work and the manufacturer is always responsible for material defects and design flaws.

Federal OSHA Subpart P, Excavations only requires that the name of the registered professional engineer that stamped the data be on the tabulated data, anything required beyond that is an additional requirement set by the state or the reviewing agency.

**Engineers Stamp From Another State**

2. Does the tabulated data have to be stamped by an engineer in the state where it is being used?



- Federal and State interstate commerce regulations and OSHA state that for manufactured equipment the structural certification stamp from the state where the shoring is manufactured is to be accepted in all states. The following Federal OSHA Subpart P, Excavations definition applies to this:

**1926.650(b)-Definitions applicable to this subpart.**

**“Registered Professional Engineer” means a person who is registered as a professional engineer in the state where the work is to be performed. However, a professional engineer, registered in any state is deemed to be a "registered professional engineer" within the meaning of this standard, (OSHA Subpart P-Excavations), when approving designs for "manufactured protective systems" or "tabulated data" to be used in interstate commerce.**

Despite this definition shoring equipment reviews are constantly being held up because the engineers stamp on the tabulated data is not from the state the work is being performed. Project owners want to have the tabulated data approved and stamped by an engineer from the project state for very specific reasons;

1. So that they can be certain that all of their state laws, regulations, and engineering design standards are being adhered to.
2. If a law suit arises regarding the excavation support system, they want to be able to have the case heard in their state. If a case originates in California it can be very expensive to attend hearings on it in the state of New York.
3. Engineering associations are constantly lobbying government funding sources to make sure that the money is being spent on local engineering firms and as a result requirement for local engineering stamps are prevalent although they may conflict with interstate commerce rules.

These are all excellent and legitimate reasons for requiring that tabulated data have a local state engineering stamp. State and local governments should have the opportunity to have shoring equipment stamped in their state. The way to make this happen is for them to state it as a contract requirement so the contractor can put money in the bid for it.

In reality here is what happens. The reviewing engineer refuses to approve the shoring submittal without the local stamp. The contractor goes back to the shoring supplier to get the tabulated data locally stamped, the shoring supplier goes back to the manufacturer for the local stamp and then the tabulated data is taken to a local engineer for his review and approval. The cost for the local engineer's work is paid for by either the shoring manufacturer, the shoring supplier, or the contractor with money that was not in the bid. Aside from the time lost in this process it is extremely burdensome for a shoring manufacturer to hire a single engineer with all states and Canada stamps or use several engineers in different regions to maintain his tabulated data.



Here is what should happen. At bid time the contractor should review the contract specifications for a clear statement such as “A local engineers stamp will be required on all tabulated data. The stamp of the engineer in the state it was generated in will not be sufficient unless it is the stamp of the state where the work is being performed”. The contractor should put money in his bid for the cost of having a local engineer reviews and stamp the tabulated data.

The above regulation states ... **designs for "manufactured protective systems" or "tabulated data" to be used in interstate commerce.** This does not seem to include site specific plans, most likely because they are not related to interstate trade.

Federal OSHA does not specifically require that for site specific plans the engineers stamp has to be from the state where the work is being performed. If the owner wants that for the reasons stated above then it should be specified in the contract.

#### **Registered Engineer**

There is a large amount of tabulated data out there that was developed by engineers that is no longer registered, out of business, deceased, license revoked, etc.. If the engineer is no longer registered then the tabulated data does not meet the OSHA requirement. They want a living person that they can identify and find.

When using an engineer to develop site specific plans or review and over stamp tabulated data it is important to make sure that the engineer has experience with temporary works that involve excavation and shoring. State engineering laws require that engineers must have experience with the type of engineering work they are putting their stamp on. This type of work usually involves interpreting information from geotechnical reports, structural design with steel, aluminum, and timber, and familiarity with general construction engineering practices.

In summary, satisfying OSHA stamped engineering requirements is a fairly simple matter, just make sure there is an engineers stamp on the tab data or site specific plan and make sure that engineer is registered at some location. If the project owner requires more than this it should be stated in the contract specification or ordinances where the work is being performed.

This information is not a legal determination, it generated from experience as an engineer working within the construction and shoring industry.

*About the Author: Joe Turner, P.E. serves as National Trench Safety's Director of Engineering, Research and Product Development. Mr. Turner is one of the most recognized figures in the trench safety industry, having provided trench safety plans for the last 20 years. Among his many accomplishments, is the book Excavation Systems, Design, Planning and Safety, which was published by McGraw-Hill in 2008 and is still used today as a reference for many students and professionals regarding proper engineering techniques.*