California Underground Facilities

Safe Excavation Board

Item #3

Agenda Item – Staff Report

DATE: February 23, 2018

TO: Members, Underground Facilities Safe Excavation Board

FROM: Jason Neyer, Analyst

SUBJECT: Identification of Relevant Education

SUMMARY:

In order to recommend or propose education in lieu of financial penalties, the Board must identify relevant, affordable educational curricula and providers. Additionally, the Board must determine who must take such education in a landscape where some companies are sole owner-operators and others have hundreds to thousands of employees. To address this concern, staff researched what safe excavation around underground facilities education other states use as a corrective measure.

DISCUSSION:

No standard exists for states to adopt for how educational training should be used as a corrective measure. There are, however, patterns that states with further developed underground excavation programs tend to follow. Educational training tends to be used as the second step in a three-step escalation of enforcement, preceded by warnings and followed by fines.

The most used form of educational training is conducted by a trainer in a classroom setting. At the end of the class a test is provided and a passing score is required to receive a completion certificate. Passing scores range from 80% to 90%. Advantages of a classroom setting include being able to positively identify those taking the test and ensure engagement in the material. Disadvantages include having to attend a class at a set time that may involve long travel times and missed work. This type of requirement would seem to burden smaller companies, with less employees more directly. These trainings are conducted by both non-profit organizations and private companies and prices range from \$0 to \$500/person.

While most states have some sort of online educational material, few have online material that address corrective action that satisfies an ordered requirement. There are several states that have interactive computer based training attached to their 811 sites. The state of Virginia has online training called, "Dig with Care, Keep Virginia Safe." This training can be taken in three different ways. First, as an educational training without a

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final test. Second, as an educational training with a test. And third, as a part of a settlement process initiated by the state corporation commission. Advantages of online training include ease of use and affordability. Disadvantages include not being able to positively identify test takers.

Many states require education as part of a violation and the rules for who needs to attend vary. Indiana differentiates attendance requirements for excavators and operators. Excavators in violation are required to have a minimum of three employees trained and must include one manager or supervisor. The remaining spots can be filled by safety officers, excavators, or those responsible for calling in locates. Operators in violation are required to have a minimum of three employees trained and must include one manager or supervisor. The remaining spots can be filled by operator qualification are required to have a minimum of three employees trained and must include one manager or supervisor. The remaining spots can be filled by operator qualification personnel, an internal person supervising locating or external personnel (contractors) supervising locating. Training requirements begin after a second violation. Utah takes a less structured approach to its education requirement and uses an inspector's judgement of when education is appropriate. When it is discovered that the violation was caused by a lack of "know how", education may be appropriate. New Mexico requires individuals directly responsible to attend an education class.

Workshop Questions:

- 1) Which violations are suitable for education?
- 2) What education is available to address these violations?
- 3) How much does this education cost?
- 4) Who in an organization should be required to participate in education should the Board choose to require education in lieu of fines?
- 5) What languages should instruction and educational material be available in?
- 6) How education requirements and opportunities interact with other required education, such as that of OSHA?