MINUTES FROM THE ADVISORY COMMITTEE MEETING FOR
FIELD SURVEY OPERATIONS, WORKING ALONE

April 26, 2016
Sacramento, California

The meeting was called to order by the Chair, Michael Nelmida, Senior Engineer, Occupational Safety and Health Standards Board (Board) at 10:10 a.m. on Tuesday, April 26, 2016. The Chair welcomed the Advisory Committee members and asked for self-introductions. The Chair then reviewed the Board’s policy and procedures concerning the goals, objectives, and the Board’s use of advisory committees.

The Chair explained that this rulemaking development process was initiated in response to the consensus of the subcommittee for “Working Alone in the Construction Industry.” Specifically, that consideration be given to potential rulemaking to address the circumstances of employees, working alone, when engaged in field survey operations.

Necessity
The committee consensus was that sufficient grounds existed to recommend rulemaking regarding employees performing Land Survey Operations. Alex Calder, California Land Surveyors Association, voiced the opinion that employees working in active traffic lanes, alone, was dangerous and stated that the necessity for such a regulation was obvious. Mike Donlon, Department of Water Resources, drew the distinction between the need to protect employees and the legal hurdle for “necessity” to achieve the aims consistent with the Administrative Procedure Act. Donlon also highlighted the need to show accident and injury data sufficient to satisfy the Office of Administrative Law’s scrutiny, which was part of the rulemaking process. Bruce Wick, CalPASC, recalled discussions regarding concerns over accident and injury data. Wick pondered the breadth of data that would suffice to establish necessity.

Injury and Illness Prevention Program Coverage
Mike Donlon questioned why working alone was not already covered under the Injury and Illness Prevention Program (IIPP). Donlon pointed to the Chair’s proposed regulatory text, which integrated the IIPP. John Rector, Operating Engineers, Local 3, responded that emerging technology has fostered the decrease in the size of survey crews. Rector continued to opine, that despite concerns regarding employees who had difficulty seeking aid while working alone, survey companies have not recognized working alone as an aspect of employment to be addressed by their IIPP.

Proposal of the Committee
The committee considered the two proposed regulatory texts. The first proposed regulatory text was prepared by Operating Engineers, Local 3 (OE3) and submitted by John Rector. The second proposed regulatory text was prepared by the Chair. The Chair characterized the second as an
accountability standard to ensure that employers knew of the status of their field employees when working alone. Alex Calder raised that both the Operating Engineers and the Chair’s proposed regulatory texts were lacking. Mike Donlon suggested drafting a proposal combining the two prepared by the Chair and OE3 with input from the committee.

The proposal ultimately recommended by the committee is as follows:

**Land Survey Operations**

*(a) Scope and Application*

This section applies to land surveying operations as described in Business and Professions Code 8726 (a) through (f).

*(b) A minimum of two people are required when:*

1. exposed to the hazards of vehicular traffic
2. on construction sites with heavy equipment in operation.

*NOTE: For the purpose of this section heavy equipment shall include such equipment as haulage vehicles, scrapers, loaders, crawler or wheeled tractors, bulldozers, graders and similar equipment.*

*NOTE: Employers have to comply with Section 3395(f).*

**Scope of Regulation**

John Rector suggested that the proposal should be based on the activities described in the Business and Professions Code (B&P Code), Section 8726. Additional committee members agreed that the scope should be limited to the activities within the B&P Code. The Chair suggested the scope be culled down to subsections (a) through (f) to encompass the ‘field’ aspect rather than the ‘business’ aspect of Land Surveying. The committee agreed to a scope of B&P Code, Section 8726(a) through (f).

**Remote Locations**

The Committee consensus was in agreement with Eric Berg, Division of Occupational Safety and Health (DOSH), who raised that Section 3395(f) served to sufficiently address work in remote locations and areas where there were no reliable means of communications. Mike Donlon articulated different options for communications systems including cell phones, satellite phones, a "spot-device" and a repeater system. The spot-device is an electronic device capable of sending an alert in case of an emergency. Donlon highlighted the cost-effectiveness of the "spot-device" and additional features which would allow for the employees to send out pre-prescribed text-based status messages. Duane Friel, Operating Engineers, Local 12, countered that communications systems would be ineffective if the employee were to be separated from the device or incapacitated. John Rector raised anecdotes regarding employees who had restricted access to aid while working alone. The concerns were directed at the impediment to reaching their vehicles due to their injuries or having to rely on other trades for assistance. Berg shared a case where two agricultural workers were working in a remote location; one had a heart attack, and despite having a functioning communication system, the employee perished.
The Committee debated the terms "rural" and "remote." Evan Page raised that "remote locations" should be defined, characterizing "remote" as a vague term. Friel claimed that locations, where there was no cellular service, would qualify as a "remote location." Friel cited an example of a solitary employee surveying ‘monuments’ in the desert where there was no cellular service. Berg reiterated the agricultural scenario he posed earlier, where a pair of employees had a means of communications. However, the delay in treatment may have played a role in the death. In later discussions, Berg raised the provisions of Section 3395(f) which required means to access emergency medical services. Berg suggested that the scope of Section 3395 includes all outdoor places of employment. Section 3395 would include the rural and remote locations the committee believed were a concern to Land Surveyors who performed or were assigned to perform work alone. Rector proposed including selected portions of Section 3395(f) into the proposal. The Chair opined that including a portion of 3395(f) (rather than intact) into the proposal might undermine the requirements of Section 3395 which would be superseded by the proposed language and would be more permissive.

**Two-Person Crew**

Alex Calder raised the need for a 2-person minimum as reflected in the OE3 proposal. Calder opined that in some cases in urban areas with 'heavy traffic volumes', it was desirable to have up to 5 or more persons involved. David Woolley, California Land Surveyors Association, claimed that companies that ‘fielded’ single person crews were putting pressure on other companies to do the same to stay competitive. Woolley argued that even when companies would ‘bid' for a single person crew, that a second person would often accompany them, rather than place a single employee at risk. Moreover, Woolley later commented about the concerns of employee fatigue when working with the survey equipment, which the employee would have to carry from location to location. Evan Page, California Land Surveyors Association, argued that, in some cases, a second person was not necessary for areas where there is little risk to employees or infeasible for small employers. Page took the position that a second person would be more costly than implementing technological aids such as those raised by Mike Donlan (see Remote Locations). John Rector asserted that a second person was less costly than technological aids raised by Donlon, which would require a subscription (and recurring fee for service).

The Chair raised questions regarding the role of the second person. The Chair asked the Committee whether the role of the second person was to act as a spotter or to seek and render aid. The Chair, in a post-committee-meeting email, queried and received responses from members that the role would be inclusive of the role of a spotter, seeker of outside emergency medical services and provider of first aid when necessary.

Page raised that the proposal should consider including a management exception. Rector disagreed, saying that such an exemption could be abused by unscrupulous businesses. Donlon articulated the point that only owners (as distinct from managers) of companies are exempt from OSHA requirements.
CPR and First Aid Provisions
At the request of John Rector, the Committee discussed the requirements for first aid and CPR training as included in the Operating Engineers, Local 3 proposal. The committee agreed that the requirements of Title 8 Section 1512 and 3400 sufficiently addressed those concerns.

Alternatives
The Chair introduced into the discussion the potential alternatives such as improving sections within Article 10 and 11, which addressed the same hazards raised by the proposal recommended by the committee. Sections such as 1590 and 1592, include surveyors and other trades exposed to similar hazards. Committee Members from Operating Engineers and California Land Surveyors Association opined that regulations directed at surveyors would overcome a lack of authority to address the hazards of heavy equipment to which employees were exposed. CLSA members argued that requests from survey companies to controlling contractors were ignored because the controlling contractors perceived that the Heavy Equipment operators (who would be ‘creating employer’ under Section 336.10) were either in compliance with the requirements of sections 1590 and 1592 or simply unwilling to implement additional safeguards.

Mike Donlon stated that traffic controls requirements already exist within the Construction Safety Orders (Section 1598). The Chair later raised the potential of modifying the requirements for references to the Manual on Uniform Traffic Control Devices MUTCD (within Section 1598). David Woolley highlighted the hazard of working in traffic lanes. Woolley’s concerns centered on the increase in distracted drivers; that the frequency of distracted drivers posed a greater hazard to employees working in traffic lanes. Woolley drew a connection between work around distracted drivers and the awareness surveyors would have which was compounded by fatigue, later in the workday, from carrying surveying equipment. The Committee took the position, recommended by Bruce Wick, that a proposal focused on surveyors would encourage other trades to seek improvements in the related standard and that a future committee would seek to improve the requirements of Articles 10 and 11.

Heavy Equipment on Construction Sites
The Committee discussed the term “heavy equipment” based on the “Application” to Article 10. The Committee included as a note within the draft proposal the types of vehicles which would need to be in operation on the construction site to trigger the requirement of the draft proposal. The Committee excluded from consideration mobile and fixed cranes, since the concern was not overhead hazards, but rather being struck by heavy equipment traversing the construction site at the pedestrian level.

Placement of Proposal Within Article 3 of the Construction Safety Orders (CSO)
The Committee consensus was that the proposal be located within Article 3 of the CSO. The rationale was that the proposal would be located in a general section rather than contained within Articles that limited the scope further. Bruce Wick also raised that the placement of the regulation may affect what other regulations may also apply. Wick cited Section 1512 (Emergency Medical Services) as an example that would apply as well should this be limited to the CSO. The consensus of the committee to advise locating the proposal within the CSO would provide that the proposed regulation encompass Land Surveyors under conditions where the
hazards of traveling heavy equipment and vehicles posed the greatest hazard. Land Surveyors
within General Industry settings (as opposed to construction) would not be prone to the hazards
specified in the proposal.

**Exposed to the Hazards of Vehicular Traffic**
The Committee discussed terminology for work in “active traffic lanes” as proposed by Mike
Donlon based on discussions regarding the proposal by Operating Engineers Local 3. Donlon
would later suggest when ‘exposed to the hazards of vehicular traffic’ based in part on the
requirements of Section 1590(a)(5). Other suggestions such as "open traffic lanes" as suggested
by John Rector and "uncontrolled traffic lane” by the Chair, were rejected by the committee for
the clarity afforded under the excerpt from Section 1590(a)(5).

**Cost of Implementation**
The Chair queried the Committee regarding the costs for implementing the proposal. Eric Berg
opined that the cost would be based on the number of employees who work alone and their wage.
Dave Woolley suggested that the only ‘concrete data’ was based on surveys conducted by the
California Land Surveyors Association from a chapter in Southern California. John Rector and
Duane Friel suggested that information regarding the number of employees who work alone
could be estimated based on the data collected by each union in combination with costs based on
the "prevailing wage" of surveyors on public projects. Evan Page suggested that basing cost on
prevailing wages may be an inflated cost. Page suggested that a value of 80% of the prevailing
wage would be reflective of public and private costs. Rector agreed with Page’s value of 80%.
Operating Engineers, Locals 3 and 12 agreed to provide the Chair with estimates regarding wage
and numbers of employees to assist in the estimation of cost.

**Adjournment**
Having exhausted all avenues of discussion, the Chair briefed the committee where the
rulemaking may lead and thanked the members of the committee for their input and the efforts of
Operating Engineers, Local 3 for their assistance in the advisory committee. The Chair
adjourned the Advisory Committee meeting at 3:00 pm.