

DRAFT

**Cal/OSHA Advisory Meeting
Construction Lead Standard – Title 8, Section 1532.1
Thursday, May 28, 2015
Oakland, CA**

Welcome: Juliann Sum, Chief; Eric Berg, Acting Deputy Chief for Health

Meeting Chairs: Steve Smith, Bob Nakamura, Peter Scholz

Notes: Mike Horowitz, Nancy Olsson

Attendees:

Name

Affiliation

Banaee, Sean	SCE, Industrial Hygienist
Barba, Ruben	Northern California Laborers' Local 67, Union Representative
Bateson, Gail	Worksafe, Oakland, CA
Benne, Lorna	California -- Department of Transportation
Bledsoe, Chris	California --Department of Transportation, T.E., Cal-Trans
Cooper, Michael	I. H. Consultant
Coyle, Patricia	CDPH, Occupational Health Branch
Deems, Mary	CDPH, Occupational Health Branch
Doherty, Frances	Doherty Restoration, San Francisco, CA
Ely, Mike	Janus Corporation, Concord, CA
Fagrey, Steve	PDCA
Forchione, Jo	Pacific, Gas & Electric Co., Santa Rosa, CA
Goldman, Eric	San Francisco Water Department
Gottesfeld, Perry	Occupational Knowledge International, San Francisco, CA
Hagen, Dale	Alameda County Healthy Homes, Oakland, CA
Harrington, David	Cal/OSHA, Consultation, Oakland, CA
Heramb, Brian	Sempra Energy Utility, San Diego, CA
Hipkins, Karen	
Hollis, Jill	California Transportation, District 9
Jackson, Rebecca	CDPH -- Occupational Health Branch
Jones, David	Associated General Contractors of America
Jordan, Dennis	Jordan Consulting, San Leandro, CA
Kernazitskas, David	OSHSB
Kosnett, Michael	University of Colorado, Denver, CO.
Lee, Christopher	United Contractor
Moelk, Andy	Jeffco Painting, Vallejo, CA
Manthe, Steve	Association of Environmental Contractors
Materna, Barbara	CDPH, Occupational Health Branch
Mazzocc, Kristina	

McAllister, Scott	M&M Health Services
Murphy, Michael T.	DPR Construction Co.
Muzaffar, Saeher	California Department of Public Health
Napier, Dan	DNA, Manhattan Beach, CA
Pantoja, Maurice	Los Angeles County, Environmental Health Department
Pettijohn, Julie	CDPH – Occupational Health Branch
Rozance, Eric	Phylmar Regulatory Roundtable, Prunedale, CA
Smith, Jeremy	State Building Trades, Sacramento, CA
Smith, Kim	California Dept. of Transportation
Souza, Denise	California Association of Occupational Health Nurses
Spielman, Howard	Health Science Association, CIHC
Thompson, Kevin	Cal/OSHA Reporter
Toyota, Angie	Los Angeles County, Public Health Department, CLPPP
Trang, Jora	Worksafe, Oakland, CA
Vork, Kathleen	Office of Environmental Health Hazard Assessment, Oakland, CA
Vuglia, Joe	HMS, Inc., Fresno, CA
Weir, Jay A.	AT&T, Sacramento, CA
Weisbrod, Justin	Chrisp Company, Fremont, CA
Wells, Vickie	San Francisco City and County, Department of Public Health
Werbelow, Frank	DPR Construction, Redwood City, CA
White, David	
Wick, Bruce	CALPASC, Redlands, CA
Wise, Justin	
Yarbrough, Ed	California Department of Transportation -- Northern Region

Introduction

Juliann Sum, Cal/OSHA Acting Chief, opened the meeting by welcoming the attendees to the meeting. She introduced Cal/OSHA staff.

Eric Berg thanked everyone for attending.

Steve Smith reviewed the history of the lead advisory process up to this point. Cal/OSHA envisions a final meeting in the fall to discuss both drafts, and then getting a proposal to the Board by the end of the year.

Peter Scholz read through the “Cal/OSHA Lead Standards – Summary of Main Changes in Drafts” and the schematic diagram of the current draft.

Burt Olhiser It should be clear to the contractor whether the ‘initial’ BLL testing called for in (j)(1)(A) is prior to assignment or not.

Mike Ely We want to avoid our guys becoming ‘pin cushions.’ I want to test our guys annually.

Jora Trang We support the idea of defining the ‘initial’ BLL test as ‘prior.’ Also would like education about BLL testing to be given to workers stressing the importance of BLL, where to eat, and basic contact info. We would like this required to be provided in written form to employees.

Dan Napier As written, the standard is vague about when BLL is to begin. We see people BLL testing even though we haven’t seen exposure from this task.

Peter Scholz If you have historical data showing exposures under the AL, you don’t have to do BLL testing.

Michael Kosnett Is the initial BLL test before you start work? or within a month? Do we want it as a baseline to prevent a hi-level from being further exposed?

Dale Hagen P. 17 says “after initial placement.” That is after initial placement in > AL task.

Peter Scholz I hear that it ought to be clearer, that the ‘initial BLL’ doesn’t recur if you are jumping from job to job.

Basic Hygiene Requirements

Peter Scholz introduces ‘basic hygiene’ draft language of (i)(1)&(4)&(5).

Kim Smith It says ‘work areas’. We may have a containment, but how do we decide what the ‘work area’ encompasses?

Ed Yarbrough We need the perimeter of the actual work area to be defined.

Brian Heramb We have small, mobile crews and it would be difficult for us to cordon off work areas. Also, it talks about washing facilities. There are other methods such as hand wipes.

Peter Scholz We are referencing Section 1527(a) here. What a ‘washing facility’ is, is defined there.

Scott McAllister Employers have to define a regulated area. Employers should find a clean area for eating outside the regulated area.

Howard Spielman On (i)(1), simply deleting “in work area” might be a simple solution.

Burt Olhiser The concern our industry has is that, on bridge jobs, our decon station might be a mile away. So “readily accessible” concerns us as there have been attempts to cite for not having the plumbed facilities on the bridge.

Gail Bateson It seems that, on the eating areas, this language is oriented towards general industry and not small construction worksites. People should not be eating in their dirty trucks. Seems like it ought to address this reality. Also many people don’t know how to wash. Maybe this should also be addressed in the training section. NIOSH says that it often hard to get lead off.

Jay Weir We have mobile construction crews of 1 -5 employees. Mobile crews are exempted from 1527.

Brian Heramb If employees bring their own beverages, would the employee be responsible for ensuring that they are not causing lead exposure when they are consumed?

Peter Scholz Yes, that would have to be enforced by the employer.

Brian Heramb Then the language should more general, not just limited to water provided by the employer.

Justin Wise Do these requirements apply for exposures over the AL?

Peter Scholz No, to all occupational exposure to lead.

Dan Napier Maybe this needs to be defined.

Peter Scholz We think it is sufficiently clear what occupational exposure is. Work that exposes employees above normal background amounts of lead.

Justin Wise But we are concerned not how OSHA will interpret this. But how people we work for will interpret this. We remove leaded striping on roads.

Ed Yarborough Lead materials have been mostly replaced except in rural areas. I understand where he is coming from. This 'eating facilities' needs to address mobile, roadside crews.

Justin Wise Since we are < AL now, we don't have to provide anything but wipes.

Lorna Benne We (at Caltrans) walk around watching work. There is aurally deposited lead in the soil. If you say "any lead level....."

Ed Yarbrough Once again, you are talking about mobile crews. You are going to have to address this.

Michael Kosnett I think this section addresses recognition that hygiene is necessary because of hand to mouth contact. This can lead to high BLLs even if air levels are <AL. If you are removing leaded striping for example. I agree with the inclusion of this language.

Vickie Wells We haven't had to provide eating facilities in the past. It will be very burdensome. I don't know how we would do that.

Dan Napier Driver may never handle or contact the material. We can get airborne levels of 3 on some roads. We have to define where the standard stops.

Peter Scholz I'm hearing a lot of concern about the definition of 'occupational exposure', and about mobile crews.

Howard Spielman Can you name a construction task that is not a 'trigger task' that would require hygiene?

Peter Scholz Handling lead cable, perhaps.

Jo Fortione To Howard's point: handling cable, or because more and more of our work is on contaminated sites. We had a digging job and got $15 \mu\text{g}/\text{M}^3$ just from an inspector walking through the area. We need crystal clear definitions.

Peter Scholz Let's talk about the new language in (i)(5); the requirement for cleaning of hygiene facilities.

Dennis Jordan Please define 'clean.'

Burt Olhiser Fed/OSHA defines $<200 \mu\text{g}/\text{ft}^2$ as clean. Is that what we are looking? We need some definition.

Vickie Wells designated lead hygiene facilities will get specific cleaning. But other facilities will get cleaned like every other one is. We need to be clear here which we are talking about.

Frances Doherty Sometimes my guys are using house bathrooms and they aren't always so clean! How do I write a policy for that? The cleaning service is cleaning the sink that is with the outside bathroom.

Draft AL and PEL

Ed Yarbrough $2\mu\text{g}/\text{M}^3$ means that every Caltrans worker near aerially-deposited lead, every employee who touches dirt would have to be tested. Is this not overkill?

Steve Smith Do you have exposure data for this?

Ed Yarbrough Dan writes our compliance plans.

Dan Napier Air monitoring and exposures are not necessarily related. Lowering the PEL is a solution in search of a problem. Every jobsite would be a respirator use and BLL tested job. The highest level on a Caltrans job I've seen is $10 - 15 \mu\text{g}/\text{M}^3$ in a horrific dust cloud. It takes that kind of mismanagement to get this level. Also you can't measure as low as $2\mu\text{g}/\text{M}^3$ with our analytical methods.

Howard Spielman We've done a lot of air sampling where there has been excavation in high dirt lead levels. We have not seen $2 \mu\text{g}/\text{m}^3$. If you think about how much dust would have to be in the air to reach a level of $2 \mu\text{g}/\text{M}^3$ lead, it would have to exceed the nuisance dust standard by a significant amount.

Also these lower levels can be seen with different analytical methods. I've prepared a table on this.

Ed Yarbrough In our contracts we are, in some areas, dealing with hazardous waste levels of lead in the soil. This is routine in urban areas. This is the center of my concern. We need to get some data from these projects and provide them to Cal/OSHA.

Michael Kosnett Because CalTrans has had a good record protecting its employees doesn't mean Cal/OSHA shouldn't take steps to protect the broader range of workers. At $2\mu\text{g}/\text{M}^3$ the 95th tile worker would have a BLL of $10\mu\text{g}/\text{dl}$. And we want to maintain BLL below $10\mu\text{g}/\text{dl}$. So I think there is a scientific rationale that workers exposed over $2\mu\text{g}/\text{M}^3$ for more than 10 days a year have medical surveillance.

Burt Olhiser If these levels are adopted, it will cease all sandblasting in CA. It is not possible to achieve these level of protection with the current technology that is available. We've proposed a PEL of $25\mu\text{g}/\text{M}^3$ and an AL of $12\mu\text{g}/\text{M}^3$. These are achievable with technology at the current level. I'm talking about work for state agencies. I noticed that you put in the proposal to change workers out every 2 hrs. while doing sandblasting.

Steve Smith Do you have exposure data to back this up?

Burt Olhiser I have tons of data. During sandblasting industrial structures, our average exposures run about $5000 - 10,000\mu\text{g}/\text{M}^3$. We often seeing $25,000\mu\text{g}/\text{M}^3$; we sometimes see as much as $30,000\mu\text{g}/\text{M}^3$, but pretty rarely. We routinely see levels in the 1000 to $5000\mu\text{g}/\text{M}^3$ range.

Steve Smith And we'll have more discussion on the "2 hr. abrasive blasting" issue in a bit.

Brian Heramb Regarding Michael Kosnett's point above: is it possible that variability of construction is such that you don't reach these BLLs?

Steve Smith We are trying to achieve a BLL of $10\mu\text{g}/\text{dl}$. Our PELs are based on 8 hours/day; all are. We are also trying to move this standard off its reliance on the PEL and AL.

Howard Spielman It is conservative that the standard is based on PEL exceedance on any day. There is a bias of conservatism built into the standard and I don't think this is bad.

Burt Olhiser A lot of the science this is based on is flawed science based on construction. It assumes an average daily exposure for 40 years of a person's life. Construction exposures are variable and intermittent. So we are trying to put a square peg into a round hole. If this model worked, we would see huge BLLs on the part of these workers, because they had huge exposures. But that is not the case. The goal of keeping employees' BLLs below $10\mu\text{g}/\text{dl}$ may be too aggressive, given that it is an intermittent situation.

Jeremy Smith I want to have a conversation about how much lead it takes to make a worker sick. Do we have science on that? If the CDPH says it is less than $10\mu\text{g}/\text{dl}$, then it's less than $10\mu\text{g}/\text{dl}$ from our perspective.

Michael Kosnett A BLL of $20 - 25\mu\text{g}/\text{dl}$ increases the risk of dying. Perhaps a 50% increased risk of dying of cardiovascular disease. This has been established by long-term prospective cohort studies. These are the highest quality epidemiological studies that exist. This is confirmed by what we know about the toxicology of lead, and also by lead causing related symptoms such as high blood pressure, altering heart

beat to beat effect. and oxidative stress. So the evidence for cardiovascular effects is very strong and has been observed in multiple studies. If you are talking about effects on women who are pregnant, there is really no threshold that has been identified that is without deleterious effects. We know that lead levels above 5 µg/dl can be deleterious. The evidence for that is strong.

Andy Moelk I think this would double the cost of a job. And I have been in the industry for 37 years and have yet to see someone come forward with an illness related to lead exposure. I certainly would like to spend some time working towards reasonable requirements.

Scott McAllister Do we need to have this language in (c) that talks about “hours worked in the day”? What does that mean? It confuses people.

Steve Smith This is a holdover from the federal standard. The feds would have to be okay with any change to this language.

Peter Scholz If we do change the PEL, it affects the trigger task levels since they are set as multiples of the PEL. For abrasive blasting the feds use a presumed exposure level of 37,000 µg/M³. Since the draft Level 3 interim respiratory protection has an APR of 1000, employees are protected up to an exposure level of 10,000 µg/M³. So, in order to keep presumed levels of exposure from abrasive blasting below this level, we have to, as an ‘interim protection’, limit blasting to 2hrs. per shift which gives you 37,000 divided by 4, which is less than 10,000 µg/M³. If your air level comes back lower than this level (37,000), you can increase your shift length, as long as your full shift exposures stay below 10,000. In 1993, when the standard was initially promulgated, the feds assumed that industry, using ventilation, could keep levels inside containment below 18,000 µg/M³. We think it is a good argument to have – that now industry should be able to keep levels inside containment below 10,000 µg/M³. We may be incorrect in that assumption, but we want to have that debate.

Burt Olhiser That assumption was incorrect then, and it is still incorrect.

Mike Ely Using dry blasting you will have exposures of 5000 to 25,000 µg/M³. There are other methods you can use to reduce this. For example, you can put a water ring on there. This brings problems of steel rust and inhibitors. But there are methods to knock this down. You can use ventilation too. But as it stands, they are going to have some difficulty achieving these levels, but there are methods. We stopped sand blasting because the exposures were just too high.

Burt Olhiser Exposures in containment, on bridges and water tanks, etc.: it is routine to see exposures over 10,000, up to 25,000 µg/M³. You can’t use water because that causes flash rusting and this causes problems with coating. Yes, there are inhibitors and ways to go about this, but all of them are huge cost drivers. So if we are going to go this way, Cal/OSHA has to accept the financial responsibility it is putting on its ‘sister agencies’—Caltrans, DWR, any infrastructure. Rotating employees in and out for 2 hours is very cumbersome, very difficult. I don’t see any way that this is feasible.

And I don’t see the health reason for this. We’ve shown on multi-year bridge projects where we can keep employees’ BLL below 25 µg/dl with routinely huge exposures day in and day out.

Peter Scholz The goal here is to get BLLs below 10 µg/dl.

Burt Olhiser I think that goal is questionable.

Ed Yarbrough Caltrans requires containment primarily for environmental protection. Caltrans does not dictate means and methods. The interim 'two hour limit' might be a problem with the unions. If we are going this way, it would affect bid pricing. Are there 'low hanging fruit' to bring contractors into compliance? That's a good discussion to have. But, Caltrans doesn't get into telling contractors how to do the job, that's 'means and methods'. We look for gross violations, not whether the employer is following all requirements. This is not a multi-employer situation; the onus is on the employer.

Kim Smith We're not checking airflow on the containment. We make sure the 'bag' is 'sucked-in.'

Ed Yarbrough And following Cal/OSHA and all existing laws is a standard part of our contract.

Perry Gottesfeld 'Presumed' (lead paint) language is better in Title 17. It seems to say that as soon as you test the paint, you are out of it. You also have '1978', but it is still used in non-residential situations. Also you may want to go to 90 ppm, because that is where the new paint regs have gone. This would be a good opportunity to update that.

On the 'two hours issue' – it might be better to limit people to a day. That gives people the chance to get results over night and make adjustments that way. That would be more practical.

Brian Heramb The City of San Diego municipal code explains the history of '1978'. It says that residential structures before 1979 are presumed to contain lead. And any steel structures are presumed to be lead-containing.

Burt Olhiser There is no definition of 'lead-containing coating.' Presumably it is any detectable amount of lead by laboratory test. But I think that should be said.

Peter Scholz Let's look at the draft changes to (d)(2)(E). Any comments?

Mike Ely In 'level 2' trigger task – is water blasting part of 'power tool cleaning'?

Peter Scholz The trigger tasks, like 'power tool cleaning,' are defined in the federal preamble.

Dan Napier I would really appreciate it if you added "hand tools" because I think that is one of the, most misunderstood things.

Burt Olhiser If someone is doing wet manual scraping or sanding, are they out of the standard?

Peter Scholz They are not doing a trigger task.

Andy Moelk I agree with Burt on the 'two hours issue.' It is not reasonable. We've done a lot of BLL testing. If workers are doing everything they should do on a job, they will have a BLL of under 10 µg/dl, sometimes under 5 µg/dl. Then workers who have a track record of not complying: they'll have a BLL above 10 µg/dl.

Steve Smith Could you provide us some data on this?

Andy Moelk Yes, we are going to gather that up.

Burt Olhiser On a large industrial painting job, especially a bridge, there is a minimal amount of airflow contained. It is usually measured at 60 fpm downdraft and 100 fpm as a cross draft. This is often next to impossible to attain. In some location you can do better than that; in some locations worse. So, if you are looking for increases in ventilation, I don't know if that is at all feasible. Right now we are using the biggest equipment going, as far as dust collectors and fans inside containment, and that is as good as we can do.

Peter Scholz Yes, that is the sort of thing we want to look at. We understand that is where the rubber meets the road on this issue.

Let's next look at air monitoring frequency, (d)(6). We are thinking of leaving the triggers for air monitoring as they are, not using the new draft AL and PEL.

Vickie Wells It does not make sense. We should use the new numbers.

Peter Scholz What about the requirement for monthly BLL testing if your exposure is above 500 $\mu\text{g}/\text{M}^3$?

Michael Kosnett One day of unprotected exposure at 500 $\mu\text{g}/\text{M}^3$ will elevate your BLL above 20 $\mu\text{g}/\text{dl}$. And we have established a pattern of monthly BLL testing for a BLL over 20 $\mu\text{g}/\text{dl}$. And this is based on some modeling that Kathy Vork did for me. Although you probably didn't come to this conclusion using this logic.

Other Issues

Peter Scholz We've reached the end of the defined agenda. Any other issues that people want to talk about?

Bruce Wick Why did we move to 'presumption' in the scope? What was missing, that you felt this was necessary? I'm worried about contractors who only do a small amount of work on older buildings; now they are presumed to be exposing their workers to lead.

Ed Yarbrough I have a question on (d)(4). What are you looking for on the historical data? This is vague for us. Have there been any decisions on what this means?

Steve Smith That is original federal language. We are not changing that in the draft. I don't think we want to touch that.

Michael Horowitz There is discussion on this issue in the federal lead compliance directive. If not there, in the Chrome VI compliance directive.

Jora Trang When BLL testing is mentioned, it should be clear that this is 'on the clock,' not on the employee's own time. And that the employer pays for associated expenses. Re: medical removal protection benefits, when a worker is exposed and goes on MRP, then the job ends, we want the

medical costs to continue to get paid directly by the employer. The worker shouldn't be shunted off onto workers' compensation.

Scott McAllister Subsection (f)(2)(A) leaves out reference to 5144(o) which are the mandatory appendices. These should not be left out.

Vicky Wells Do we need to leave the ZPP test in as part of the medical exam?

Steve Smith That was our compromise with the feds: we weren't going to require it as a 'sister test' to the regular BLL testing, but it is part of the medical exam.

Brian Heramb (l)(1)(A) doesn't include cardiovascular health effects. Also in (l)(2), what's driving the standard (cardiovascular effects), should be included.

Gail Bateson The training section should include mandated training on how to properly wash hands and face. It is not straightforward.

Burt Olhiser We had recommended getting rid of (l)(3) certified training. We're the only state that has this requirement. Now with the EPA Renovation, Repair, and Painting (RRP) regulation, this creates confusion in the marketplace. Why hold on to it?

Perry Gottesfeld It is important to point out that the EPA RRP training does not cover the CalOSHA training aspects. But, with respect to general OSHA training, it does bring up that this doesn't say how long the training here should be. That kind of guidance here would be useful.

Dale Hagen I want to point out that you can't use RRP training as a substitute for the state certified worker training. The curriculum is different. Also RRP training applies only to a small subset of residential properties and child-occupied facilities. Also only one person has to be RRP-trained and he trains everyone else. It is not the same as the 3-day certified worker training.

Vickie Wells Requiring the >10 µg/dl BLL investigation every time someone comes in >10 µg/dl doesn't make sense. Some people are never going to get below 10 µg/dl, and we should have to do an investigation each time.

Michael Kosnett Seconds Perry's point on there needing to be some guidance on how long an OSHA training should be. Maybe it could be in the appendix; maybe there could be a model program that is pointed towards. Is it a ten minute thing?

Justin Weisbrod I don't want to be tied to a timed amount of training. I want to be able to train as needed.

Michael Kosnett(?) I think the initial training should be a full-day training course.

With respect to recordkeeping, in (n)(3)(C.), why are the medical removal records only kept for the duration of employment?

Vickie Wells They aren't medical records. It is just a record of medical removal – of when the employee was removed and where they were put, etc.

Burt Olhiser Just a point of clarification: BLL records: they are HIPPA records, right? I can't divulge employee BLL records to a client, for example, only to the Division?

Pat Coyle An employer is not a public entity. Other laws apply to them, but HIPPA does not. We did talk to our lawyers about this and got a legal opinion. Perhaps we can get something out to interested people.

Frank Werbelow As a general contractor, what is our obligation to assess the compliance of the sub with respect to, for example, training? They say they are doing it, but we are not double-checking and assessing their compliance.

Steve Smith We will ask our attorneys that question.

Ed Yarborough This is a common problem for general contractors. You hire a specialty contractor, but you have no one on your staff who is competent to oversee them, to even ask the right questions. How can I, as a general, know whether the electrical contractor is doing the work properly? That has always been a multi-employer question that has hung around. If it is an excavation, something that is familiar to the general contractor, then it is incumbent on them to make sure the sub is doing it right. But, for specialty work, you're asking a lot of the general.

Justin Weisbrod Are these AL and PEL set in stone, or still open for debate?

Steve Smith We are open to input at this point. Please get data to us by the end of June. We will have another meeting in the fall.