# LEAD IN CONSTRUCTION UPDATE – STATUS IN CALIFORNIA

CIHC Professional Development Seminar

San Diego, CA

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# Cal/OSHA's Lead in Construction Standard



Title 8, CCR Section 1532.1

Covers all construction work where an employee may be exposed to lead, including metallic lead, inorganic lead compounds and organic lead soaps, but not organic lead compounds.



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- No further advisory meetings are anticipated.
- DOSH expects to send the formal rulemaking package to the OSH Standards Board in early 2017.



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- HEALTH-BASED RECOMMENDATIONS TRANSMITTED TO CAL/OSHA IN JUNE 2010.



- KEY FINDINGS ASSOCIATED WITH BLOOD LEAD LEVELS (BLLs) ≥ 10 µg/dL.
  - HIGH BLOOD PRESSURE
  - DECREASED KIDNEY FUNCTION
  - LOWER BIRTH WEIGHT
  - HEART DISEASE
  - MALE REPRODUCTIVE EFFECTS
  - DECREASED BRAIN FUNCTIONS
  - DEPRESSION AND ANXIETY



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- NEED A MUCH LOWER PEL TO KEEP BLLs
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- NEED A MUCH LOWER PEL TO KEEP BLLs BELOW 5 TO 10 μg/dL
- TOOK OEHHA ABOUT 2 YEARS TO COMPLETE ITS PHARMACO-KINETIC DETERMINATION



• ACTION LEVEL (AL) 2μg/m³ (currently 30 μg/m³)



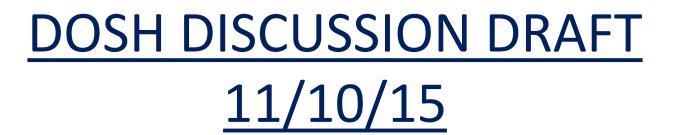


- ACTION LEVEL (AL) 2μg/m³ (currently 30 μg/m³)
- PERMISSIBLE EXPOSURE LIMIT (PEL) 10
   μg/m³ (currently 50 μg/m³)



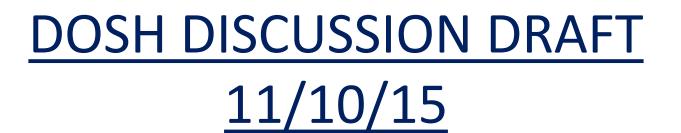


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- PERMISSIBLE EXPOSURE LIMIT (PEL) 10 μg/m³ (currently 50 μg/m³)
- ABRASIVE BLASTING PEL FOR 5 YEARS: 25 μg/m³



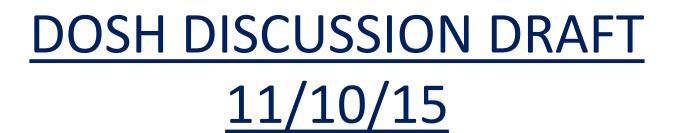


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- LEVEL 2 TRIGGER TASK PRESUMED UP TO 50 X PEL





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- LEVEL 1 TRIGGER TASK PRESUMED UP TO 10 X PEL
- LEVEL 2 TRIGGER TASK PRESUMED UP TO 50 X PEL
- LEVEL 3 TRIGGER TASK PRESUMED >50 X PEL
  - ADDS SHOWER FACILITIES REQUIREMENT



 FOR 5 YEARS MAXIMUM ABRASIVE BLASTING 5 HRS/DAY; THEREAFTER 2 HRS/DAY



- FOR 5 YEARS MAXIMUM ABRASIVE BLASTING 5 HRS/DAY; THEREAFTER 2 HRS/DAY
- INITIAL EXPOSURE DETERMINATION
   > AL < 30 μg/m³: MONITOR EVERY 12</p>
   MONTHS UNTIL AT LEAST 2 CONSECUTIVE
   MEASUREMENTS AT LEAST 7 DAYS APART
   ARE < AL. THEN MAY DISCONTINUE UNTIL</p>
   CHANGES OCCUR.



- FOR 5 YEARS MAXIMUM ABRASIVE BLASTING 5 HRS/DAY; THEREAFTER 2 HRS/DAY
- INITIAL EXPOSURE DETERMINATION > AL < 30  $\mu g/m^3$ : MONITOR EVERY 12 MONTHS UNTIL AT LEAST 2 CONSECUTIVE MEASUREMENTS AT LEAST 7 DAYS APART ARE < AL. THEN MAY DISCONTINUE UNTIL CHANGES OCCUR.
- IF ≥ 30 μg/m³ ≤ 50 μg/m³: MONITOR EVERY 6
   MONTHS UNTIL AT LEAST 2 CONSECUTIVE
   MEASUREMENTS AT LEAST 7 DAYS APART ARE <
   30 μg/m³, THEN MAY DISCONTINUE UNTIL
   CHANGES OCCUR.</li>



• IF > 50  $\mu$ g/m³: MONITOR QUARTERLY UNTIL AT LEAST 2 CONSECUTIVE MEASUREMENTS AT LEAST 7 DAYS APART  $\geq$  30  $\mu$ g/m³  $\leq$  50  $\mu$ g/m³: THEN MEASURE EVERY 6 MONTHS.



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- METHOD OF MONITORING: 95%
   CONFIDENCE ± 20% FOR
   CONCENTRATIONS ≥ 2 μg/m³.



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- METHOD OF MONITORING: 95% CONFIDENCE  $\pm$  20% FOR CONCENTRATIONS  $\geq$  2 µg/m<sup>3</sup>.
- WRITTEN COMPLIANCE PROGRAM TO INCLUDE A REPORT OF ENGINEERING AND WORK PRACTICE CONTROLS CONSIDERED BUT NOT IMPLEMENTED AND HOW THEY WERE DETERMINED TO NOT BE FEASIBLE.



 DOCUMENT UPDATING OF WRITTEN PROGRAMS EVERY 6 MONTHS.



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- HEPA FILTERS FOR PAPRS



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- N-100, R-100 OR P-100 FILTERS FOR APRS
- PROTECTIVE CLOTHING > 30 μg/m³
   (currently 200 μg/m³)



- HYGIENE FACILITIES, PRACTICES AND REGULATED AREAS.
  - OCCUPATIONAL LEAD EXPOSURE (NOT OTHERWISE DEFINED)



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  - MAINTAIN CLEANLINESS (NO SURFACE CRITERIA)



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  - OCCUPATIONAL LEAD EXPOSURE (NOT OTHERWISE DEFINED)
- CLEANING OF HYGIENE FACILITIES
  - MAINTAIN CLEANLINESS (NO SURFACE CRITERIA)
- MEDICAL SURVEILLANCE PROGRAM
  - -SOME MINOR TIMING CHANGES
  - MORE THAN 10 DAYS/YR (CURRENTLY 30 DAYS)



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- ROUTINE ZPP TESTING ELIMINATED
- BLLs:
  - INITIALLY
  - EVERY 2 MONTHS FOR 1<sup>ST</sup> 6 MONTHS AFTER INITIAL PLACEMENT AND AFTER ANY CHANGE IN TASK RESULTING IN HIGHER EXPOSURE AND THEN EVERY 6 MONTHS THEREAFTER.
  - ≥ 10 μg/dL < 20 μg/dL (currently 40 μg/dL) AT LEAST EVERY 2 MONTHS UNTIL 2 CONSECUTIVE AT LEAST 30 DAYS APART ARE < 10 μg/dL (currently 40 μg/dL)



- -≥ 20 µg/dL AND DURING REMOVAL PERIOD: MONTHLY
- LEVEL 3 TRIGGER TASK: MONTHLY AND 3
   DAYS AFTER.
- -> 500 μg/m³ AIRBORNE EXPOSURE:
  MONTHLY AND 3 DAYS AFTER



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- MODIFICATIONS IN EMPLOYEE NOTIFICATION REQUIREMENTS



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   DAYS AFTER
- BLL TESTING VIA OSHA LISTED LAB.
- MODIFICATIONS IN EMPLOYEE NOTIFICATION REQUIREMENTS
- MEDICAL EXAMS PRIOR TO ASSIGNMENT AND ANNUALLY.



#### MEDICAL REMOVAL

- -LAST BLL ≥ 30 μg/dL (CURRENTLY 50 μg/dL)
- -LAST 2 BLLs ≥ 20 µg/dL
- -AVERAGE OF LAST 6 MONTHS ≥ 20 µg/dL
- -FINAL MEDICAL DETERMINATION (BY PHYSICIAN)
- -NOT PERFORM ANY TRIGGER TASKS
- -ANY MATERIAL WITH LEAD ≥ 0.5%



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  - LAST BLL ≥ 30 μg/dL (CURRENTLY 50 μg/dL)
  - LAST 2 BLLs ≥ 20 μg/dL
  - AVERAGE OF LAST 6 MONTHS ≥ 20 µg/dL
  - FINAL MEDICAL DETERMINATION (BY PHYSICIAN)
  - NOT PERFORM ANY TRIGGER TASKS
  - ANY MATERIAL WITH LEAD ≥ 0.5%
- RETURN: 2 CONSECUTIVE BLLs AT LEAST
   30 DAYS APART ≤ 15 µg/dL



HAZCOM: SOME ADDITIONS



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- EXPOSURE MONITORING
  - RECORDKEEPING ADDS DETAIL