

# LET'S GET THE LEAD OUT

(Regulatory Update)

CIHC / AIHA – SVS 4<sup>TH</sup> ANNUAL

OCCUPATIONAL HEALTH AND INDUSTRIAL HYGIENE SUMMIT

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- NOT A COMPREHENSIVE REVIEW OF CURRENT STANDARDS
- FOCUS IS ON PROPOSED CHANGES

# BACKGROUND

- CURRENT STANDARDS BASED ON 42 YEAR OLD TOXICITY INFORMATION (1978).
- HARMFUL EFFECTS OF CHRONIC AND LOW LEVEL EXPOSURES TO LEAD IN ADULTS OCCUR AT SUSTAINED BLOOD LEAD LEVELS WELL BELOW THOSE CURRENTLY ALLOWED BY THE STANDARDS.
- HEALTH BASED RECOMMENDATIONS TRANSMITTED BY DPH TO CAL/OSHA IN JUNE 2010.

- KEY FINDINGS ASSOCIATED WITH BLOOD LEAD LEVELS  
(BLLs)  $\geq 10 \mu\text{g}/\text{dl}$ 
  - HIGH BLOOD PRESSURE
  - DECREASED KIDNEY FUNCTION
  - LOWER BIRTH WEIGHT
  - HEART DISEASE
  - MALE REPRODUCTIVE EFFECTS
  - DECREASED BRAIN FUNCTIONS
  - DEPRESSION AND ANXIETY

- WORKER BLLs SHOULD NOT EXCEED 5 TO 10  $\mu\text{g}/\text{dl}$  OVER A WORKING LIFETIME
- NEED A MUCH LOWER PEL TO KEEP BLLs BELOW 5 TO 10  $\mu\text{g}/\text{dl}$
- OEHHA TOOK ABOUT 2 YEARS TO COMPLETE A PHARMACO-KINETIC DETERMINATION

- AB No. 35  
Legislation enacted in October 2019
- Rulemaking  
8CCR 5198. Lead (General Industry)  
8CCR 1532.1. Lead (Construction)

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- Last available drafts for public consumption are dated November 2016. Coincidental with the last advisory committee meeting.

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- Shall consider a lab report of an employee's blood lead level at or above 20  $\mu\text{g}/\text{dl}$  to be injurious and report within 5 business days to DOSH.
- **Actionable level: triggers an employer obligation to reduce lead exposure or an investigation by the division**

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## Labor Code 147.3

- DOSH receipt of a report from DPH:
  - is a complaint charging a serious violation.

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## Labor Code 147.3

- DOSH receipt of a report from DPH:
  - is a complaint charging a serious violation.
  - DOSH to initiate an investigation within 3 working days.
  - Any citations & fines imposed by DOSH made publicly available pursuant to 6309(d).

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# CCR 5198.Lead (General Industry)

- Does not apply to the construction industry or to agricultural operations.
- Reduces the Action Level from 30  $\mu\text{g}/\text{m}^3$  to 2  $\mu\text{g}/\text{m}^3$  TWA.
- Reduces the PEL from 50  $\mu\text{g}/\text{m}^3$  to 10  $\mu\text{g}/\text{m}^3$  TWA.

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- Reduces the PEL from  $50 \mu\text{g}/\text{m}^3$  to  $10 \mu\text{g}/\text{m}^3$  TWA.
- Altering/disturbing material  $\geq 0.5\%$  by weight is trigger, with special notation regarding torch cutting any scrap metal.

## CCR 5198.Lead (General Industry)

- Exposure  $>50 \mu\text{g}/\text{m}^3$  TWA: repeat monitoring quarterly until 2 consecutive measurements at least 7 days apart are at or below  $50 \mu\text{g}/\text{m}^3$ .

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- Exposure  $> 30 \mu\text{g}/\text{m}^3$  TWA: repeat at least every 6 months until 2 consecutive at least 7 days apart are below  $30 \mu\text{g}/\text{m}^3$  TWA.

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- Exposure  $> 30 \mu\text{g}/\text{m}^3$  TWA: repeat at least every 6 months until 2 consecutive at least 7 days apart are below  $30 \mu\text{g}/\text{m}^3$  TWA.
- Exposure above  $2 \mu\text{g}/\text{m}^3$  but below  $30 \mu\text{g}/\text{m}^3$  : repeat at least every 12 months until 2 consecutive at least 7 days apart are below the AL of  $2 \mu\text{g}/\text{m}^3$  TWA.

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- Must reduce exposures to the lowest levels feasible.
- Written plan must include a report of the engineering & work practices considered but not implemented & how they were determined not to be feasible.

# CCR 5198.Lead (General Industry)

- Eliminates “exposed above the PEL” for more than 30 days/year and “only required to achieve 75  $\mu\text{g}/\text{m}^3$ ” from Methods of Compliance.
- Must reduce exposures to the lowest levels feasible.
- Written plan must include a report of the engineering & work practices considered but not implemented & how they were determined not to be feasible.
- Provide N-100, R-100 or P-100 filters for APRs & HEPA filters for PAPRs.

## CCR 5198.Lead (General Industry)

- Provide protective clothing above  $30 \mu\text{g}/\text{m}^3$  (reduced from  $150 \mu\text{g}/\text{m}^3$  &  $200 \mu\text{g}/\text{m}^3$  ).

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- Prohibits compressed air cleaning.

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- Vacuum cleaning via HEPA.

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- Prohibits compressed air cleaning.
- Vacuum cleaning via HEPA.
- Where “exposed to lead” no food/beverage/tobacco/cosmetics (was where above PEL).

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- General Hygiene:
  - Number of washing facilities per 3366.
  - Special cleaning compounds.
  - End of shift/entering eating areas, et. al.: “employees exposed to lead”.

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“employees exposed to lead”.
- Written methods & schedules to maintain cleanliness

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- Provide demographic info to licensed health care provider.
- No more ZPP

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  - Above AL or trigger amount of work: every 2 months for 1<sup>st</sup> 6 months and every 6 months thereafter.
  - Last blood lead  $\geq 10 \mu\text{g}/\text{dl}$  but  $<20 \mu\text{g}/\text{dl}$ : every 2 months until 2 consecutive at least 30 days apart are  $<10 \mu\text{g}/\text{dl}$ .

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- Blood lead testing
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  - Above AL or trigger amount of work: every 2 months for 1<sup>st</sup> 6 months and every 6 months thereafter.
  - Last blood lead  $\geq 10 \mu\text{g}/\text{dl}$  but  $<20 \mu\text{g}/\text{dl}$ : every 2 months until 2 consecutive at least 30 days apart are  $<10 \mu\text{g}/\text{dl}$ .
  - Last blood lead  $\geq 20 \mu\text{g}/\text{dl}$  and during removal at least monthly.

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- Blood lead  $>10 \mu\text{g}/\text{dl}$ : written response plan.
- Medical removal  $>30 \mu\text{g}/\text{dl}$  , or last two  $\geq 20 \mu\text{g}/\text{dl}$ , or last 6 months average  $\geq 20 \mu\text{g}/\text{dl}$ .
- Return after 2 consecutive  $<15 \mu\text{g}/\text{dl}$  at least 30 days apart.

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- Signage required  $\geq$  AL and where doing trigger work.

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- Signage required  $\geq$  AL and where doing trigger work.
- Some changes in recordkeeping

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  - Level 3: presumed to result in exposure >50 times PEL.

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  - Level 1: presumed to result in exposure up to 10 times PEL.
  - Level 2: presumed to result in exposure > 10 times PEL up to 50 times PEL.
  - Level 3: presumed to result in exposure >50 times PEL.
- Exception: until 5 years from effective date, abrasive blasting PEL is  $25 \mu\text{g}/\text{m}^3$  TWA

# CCR 1532.1.Lead (Construction)

- Level 1: Where lead containing coatings or paint are present, manual demolition of structures, manual scraping, heat gun applications.

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- Level 2: Manual sanding; power tool cleaning, grinding or sanding with dust collection systems; spray painting with lead paint.

# CCR 1532.1.Lead (Construction)

- Level 3: Where lead containing coatings or paint are present; using lead containing mortar; lead burning; rivet busting; power tool cleaning, grinding or sanding without dust collection systems; cleanup activities where dry expendable abrasives are used; abrasive blasting enclosure movement & removal; abrasive blasting; welding; torch cutting; torch burning.

# CCR 1532.1.Lead (Construction)

- Level 3: Where lead containing coatings or paint are present; using lead containing mortar; lead burning; rivet busting; power tool cleaning, grinding or sanding without dust collection systems; cleanup activities where dry expendable abrasives are used; abrasive blasting enclosure movement & removal; abrasive blasting; welding; torch cutting; torch burning.
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  - requires eating facilities/areas
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  - limits dry abrasive blasting to 5 hours/day; after 5 years, to 2 hours/day.

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  - requires shower facilities
  - requires eating facilities/areas
  - requires regulated areas
  - limits dry abrasive blasting to 5 hours/day; after 5 years, to 2 hours/day.
- Shower facilities in accordance with 1527.

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- Blood lead test at least monthly if conducting a Level 3 trigger task, and within 3 days after discontinuing all Level 3 work.

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- Blood lead test at least monthly if conducting a Level 3 trigger task, and within 3 days after discontinuing all Level 3 work.
- ZPP when last blood lead level  $\geq 20 \mu\text{g}/\text{dl}$ .