



DID YOU KNOW?

BELOW THE ACTION LEVEL DOES NOT MEAN “NO REQUIREMENTS.”



Federal OSHA's Action Level (AL) is $30 \mu\text{g}/\text{m}^3$ and the PEL is $50 \mu\text{g}/\text{m}^3$, each measured as an 8-hour time-weighted average (8hr-TWA).

However, some provisions of OSHA's Lead Standard apply even when exposures are below the AL. Where there is potential exposure to airborne lead at any level, employers must maintain effective lead housekeeping, inform employees of the content of Appendices A & B, and make the Lead Standard and its appendices readily available to affected employees.



WHY IT MATTERS

- Many firing ranges focus on the PEL, overlooking requirements triggered at the Action Level (AL).
- At/above the AL: periodic air monitoring, training, and medical surveillance are required.
- Above the PEL: more frequent air monitoring, exposure controls, respirators, change rooms, and showers are required.
- Housekeeping and certain employee information requirements apply regardless of AL or PEL.



COMMON MISCONCEPTIONS

- Only the PEL matters.
- Exposure below the AL means OSHA's Lead Standard imposes no requirements.
- Respirator use eliminates lead compliance obligations.
- Lead exposure monitoring is only necessary during live-fire operations.
- Dry sweeping, compressed air, or leaf blowers are acceptable for lead cleanup.
- Appendices A and B only matter when exposures exceed the PEL.



BEST PRACTICES

- Compare airborne lead exposures to the AL and PEL.
- Evaluate maintenance, cleaning, bullet-trap, and filter-change tasks; not just live fire.
- Maintain a written lead housekeeping program.
- Use HEPA vacuuming; prohibit compressed air and dry sweeping.
- Provide range employees with Appendices A and B.
- Reevaluate exposures when operations, equipment, or ventilation change.



FROM OSHA COACH

“Range owners and operators need to know the lead exposure requirements that apply to their operations. Federal OSHA's Action Level and PEL establish minimum requirements, but OSHA-approved State Plans may adopt more protective exposure limits. California, for example, significantly lowered both limits.”

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OSHA REFERENCE

29 CFR 1910.1025(b)

Action Level: $30 \mu\text{g}/\text{m}^3$, 8-hr TWA

29 CFR 1910.1025(c)

PEL: $50 \mu\text{g}/\text{m}^3$, 8-hr TWA

RELATED REQUIREMENTS

1910.1025(h): Housekeeping

1910.1025(l): Employee Information/Training

1910.1025(m): Hazard Communication



QUICK COMPLIANCE CHECKLIST

- ✓ Identify Lead Standard requirements triggered by airborne lead dust exposure results.
- ✓ Notify employees of airborne monitoring results.
- ✓ Conduct periodic air monitoring when required.
- ✓ Minimize lead accumulation on surfaces.
- ✓ Prohibit dry sweeping and compressed-air cleaning of lead dust.
- ✓ Inform range staff and employed range users with potential airborne lead exposure about Appendices A & B.



LEARN MORE



KEY TAKEAWAY

The **Action Level** and **PEL** trigger different OSHA requirements, but some lead obligations apply **below** these limits. Firing range employers must evaluate exposures against **both limits** while maintaining effective **lead housekeeping** and meeting **employee-information** requirements.

