1.0 Scope

Sunbelt Controls current policy prohibits our employees from engaging in any activities where they may be occupationally exposed to any known levels of elemental lead compounds or lead byproducts. Anyone who needs to work inside of a regulated area must first obtain clearance from both the Corporate Risk Manager and the Superintendant for that trade.

All construction work where an employee may be occupationally exposed to lead is covered by the Title 8 of the California Code of Regulations, Section 1532.1. and OSHA 29 CFR 1926.62 Lead standard.

2.0 Definitions

The Action Level (AL) is 30 µg / m³ of airborne lead. Having airborne lead concentrations at or above the AL triggers certain health and safety measures described in the standard.

2.1 Permissible Exposure Limit – the 8-hour Permissible Exposure Limit (PEL) is 50 µg / m³ of airborne lead. If the work day is longer than 8 hours, the PEL is 400 / number of hours worked per day. No employee may be exposed to lead at concentrations over the PEL.

3.0 Exposure Assessment

Exposure assessment must be performed in all workplaces where employees may be exposed to lead.

3.1 Protection of Employees During Assessment of Exposure

Where lead is present, three levels of specified tasks trigger basic protective measures, until an employer conducts an exposure assessment. The exposure assessment is an initial determination of airborne lead levels by air monitoring each specific employee task or operation. An exposure assessment may consist of data collected from similar jobs with similar tasks as long as the data was collected within the previous 12 months.

For all three levels of tasks, Sunbelt Controls must provide the following basic protective measures until air monitoring shows indicates that exposure levels are at or below the PEL:

1) Appropriate respiratory protection (type of respirator is specified according to assumed airborne lead level associated with the task performed and requirements of Table 1)
2) Appropriate personal protective equipment - clean work clothes at least weekly (daily if > 200 µg / m³ in air) - such as coveralls, gloves, hats, shoes or disposable shoe coverlets, face shields, vented goggles or other appropriate equipment,
3) Change areas with separate storage facilities for work and street clothes - Sunbelt Controls shall assure that employees do not leave the workplace with work clothes or equipment.
4) Hand washing facilities – Sunbelt Controls shall assure that employees wash their hands and face at the end of each work-shift
5) Biological monitoring, consisting of initial or baseline blood sampling for lead and zinc protoporphyrin (ZPP)
6) Training (includes Hazard Communication, respirator and lead training).

Level 1- Lowest Exposure Trigger Tasks
Assume exposures > 50 µg / m³ and up to 500 µg / m³ unless proven otherwise:
Where lead coatings or paint is present:

- manual demolition of structures
- manual scraping
- manual sanding
- heat gun applications
- power tool cleaning with dust collection system
- spray painting with lead

Any other task where Sunbelt Controls has reason to believe employees may be exposed over the PEL.

Level 2- Medium Exposure Trigger Tasks
Assume exposures > 500 µg / m³ and up to 2, 500 µg / m³ unless proven otherwise:

- use of lead-containing mortar where lead coatings or paint are present:
- lead burning
- rivet busting
- power tool cleaning without dust collection systems
- cleanup of dry expendable abrasives
- abrasive blasting enclosure movement and removal

Level 3 – Highest Exposure Trigger Tasks
Assume exposures > 2,500 µg / m³ unless proven otherwise:
Where lead coatings or paint are present:

- abrasive blasting
- welding
- cutting
- torch burning

3.2 Exposure Assessment Guidance

Air monitoring must be conducted to verify exposures are at, or below action levels. Sunbelt Controls shall collect personal air samples representative of a full shift including at least one sample for each job classification in each work area either for each shift or for the shift with the highest exposure level. (For the initial determination, Sunbelt Controls may monitor only those employees expected to have the highest exposure levels.) The worker's exposure is the exposure that would occur if they were not wearing respiratory protection.

3.3 Basis of Initial Determination

The basis for initial determination, or initial assessment of employee exposure, will be employee exposure monitoring results and relevant considerations such as employee complaints of symptoms that may be associated with lead exposure or any other information that would indicate that employees are being exposed to lead with the following two exceptions:

- Where Sunbelt Controls has previously monitored for lead exposures and the data were obtained within the past 12 months during similar workplace operations and conditions, Sunbelt Controls may rely on earlier results

~OR~

- Where Sunbelt Controls has objective data, demonstrating that a particular product or material containing lead or specific process, operation or activity involving lead cannot result in an employee exposure to lead > the AL during processing, use or handling, Sunbelt Controls may rely upon such data instead of implementing initial monitoring.

Objective data is not permitted to be used for initial exposure determination in connection with any of the trigger tasks unless the data consists of actual employee monitoring results for previous jobs.

3.4 Frequency of Exposure Assessment

- If the initial determination is < the AL of 30 µg / m³ , no further assessment is needed until there has been a change of equipment process, control, personnel, or a new task has been initiated.
- If the initial determination is at or above the AL of 30 µg / m³ but at or below the PEL of 50 µg / m³, then monitoring shall be done at least every six months. The monitoring must continue until two consecutive measurements, taken seven days apart are below the AL of 30 µg / m³.
- If the initial determination is above the PEL, then monitoring shall be done quarterly. The monitoring must continue until two consecutive measurements taken seven days apart are below the PEL of 50µg / m³. If the results are at or above the AL then monitoring must continue every six months until two consecutive measurements are below the AL, at which time monitoring may stop.

3.5 Employee Notification

Within 5 days after completion of the exposure assessment, Sunbelt Controls shall notify each employee in writing of the results which represent that employee's airborne lead exposure.

4.0 Methods of Compliance

Exposures over the PEL shall be reduced through engineering, work practice and administrative controls, to the extent feasible. Respirators may be used to supplement other controls.

4.1 Prior to the commencement of any job where exposures may reach the PEL, Sunbelt Controls shall establish and implement a written compliance program, describing the lead-emitting activities and the means by which exposures will be controlled. The program should include the following:

- Descriptions of activities that produce lead exposures
- Descriptions of the ways lead exposures will be reduced
- Basis for selecting the methods to reduce exposure
- Schedule for implementing the program
- Air monitoring data that documents the lead exposure
- Specific work practice procedures that will be utilized
- Schedule of administrative controls

- Descriptions of arrangements on multi employer work sites to inform affected employers about the lead project.
- Where mechanical ventilation is used, Sunbelt Controls shall evaluate the performance as necessary to maintain effectiveness.

4.2 Respiratory Protection

Where respirators are used, they shall be selected on the basis of air monitoring results, with the minimum level of respirator as indicated in Table 1 (or until monitoring results are available, as determined by the task being performed).

- Respirators shall be approved by MSHA/NIOSH for protection against lead dust, fume and mist.
- Employees assigned to respirator use must receive a medical determination that they are able to wear a respirator and work safely.
- Employers shall perform quantitative or qualitative fit testing of respirators at the time of initial fitting, and at least annually thereafter, for employees wearing negative pressure respirators.
- If an employee exhibits difficulty breathing with the respirator, Sunbelt Controls shall make available a medical examination at no cost to the employee to determine whether the employee can wear a respirator safely while performing the work.
- Where respirators are used, Sunbelt Controls shall institute a complete, written respiratory protection program that outlines procedures for selection, use, cleaning, storage and maintenance of respirators.
- (see attachment)
- PAPRs (Powered Air-Purifying Respirators) must be provided to any employee who requests one, where a PAPR would provide adequate protection as per Table 1.

4.3 Protective Work Clothing and Equipment

When an employee is exposed to lead above the PEL (without regard to respirator use), or to lead compounds which may cause irritation, Sunbelt Controls shall provide and assure the employee uses appropriate protective work clothing, such as coveralls or other full-body work clothing, gloves, hats, shoes or shoe coverings, and face shields, goggles, respirators or other protective equipment as needed at no cost to employees.

Work clothing shall be provided at least weekly for employees exposed over the PEL, except daily for those exposed at levels higher than 200 $\mu g / m^3$. Sunbelt Controls shall provide for the cleaning or disposal of protective clothing and equipment. Clothing to be laundered must be placed in a closed container, labeled to indicate it contains lead, and the laundered must be notified of the potentially harmful effects of lead exposure.

Cleaning of protective clothing or equipment by blowing, shaking or any other means that disperses lead into the air is prohibited.

4.4. Housekeeping

- All surfaces shall be maintained as free as practicable of accumulations of lead.
- Vacuums equipped with toxic dust-removing HEPA filters are the preferred method of cleaning surfaces where lead accumulates. Other types of vacuums may not be used.
- Shoveling, dry or wet sweeping and brushing may be used only where HEPA vacuuming has been tried and found to be ineffective.
- Use of compressed air for cleaning is prohibited, unless there is a ventilation system to capture the dust created by the compressed air.

4.5 Hygiene Facilities and Practices

- Sunbelt Controls shall assure that all employees exposed to lead > PEL wash their hands and face prior to eating, drinking, smoking or applying cosmetics.
- Sunbelt Controls shall provide, for ALL employees exposed to lead, adequate hand washing facilities, and assure (in the absence of shower facilities) that employees wash their hands and face at the end of the work shift.
- In areas where employees are exposed to lead > PEL, Sunbelt Controls shall assure that food or beverages are not present or consumed, tobacco products are not present or used and cosmetics are not applied.
- Employees exposed to lead> PEL shall be provided with clean change areas with separate storage facilities for work and street clothing, to prevent cross-contamination.
- Sunbelt Controls shall assure that employees do not leave the workplace wearing any protective clothing or equipment that was work during the work shift.
- Shower facilities, soap and towels shall be provided, where feasible, for employees exposed to lead > PEL, and Sunbelt Controls shall assure that these employees shower at the end of the work shift.
- Employees exposed to lead> PEL shall be provided with a clean lunchroom or eating area. Sunbelt Controls shall assure that the lunch area is kept free from lead accumulation and that employees do not enter the lunch area with protective work clothing or equipment that has not been cleaned by vacuuming or other methods that limits dispersion of lead dust.
- Sunbelt Controls shall establish regulated areas where feasible wherever employees are exposed above the PEL or performing trigger tasks. Warning signs shall be posted and access shall be restricted to authorized persons. Appropriate protective equipment shall be provided to and worn by employees and other persons who enter the regulated area.

5.0 Medical Surveillance

Sunbelt Controls shall assure that all medical examinations and procedures are performed by or under the supervision of a licensed physician. All costs of medical examinations are Sunbelt Controls responsibility and may not be charged to the employee.

The employee has the right to seek a second medical opinion regarding the lead medical evaluation, at the expense of Sunbelt Controls, and if necessary a third physician may be requested to resolve any disagreements between the first two.

Prophylactic chelation, the routine use of chelating drugs to lower blood lead levels (BLL) in persons occupationally exposed to lead is prohibited.

5.1 Biological Monitoring

Initial blood sampling and analysis for BLL and zinc protoporphyrin (ZPP) are required for employees performing any of the specified trigger tasks, or for any employee exposed to an air lead level at or above the AL for at least 1 day.

Employees who are or may be exposed at or above the AL for more than 30 days in any consecutive 12 months, must be enrolled in a medical surveillance program, including BLLs and ZPP at least every 2 months for the first 6 months, and every 6 months thereafter.

Any employee with a BLL at or above 40 µg / dl shall have a BLL and ZPP every two months until two consecutive samples are <40 µg / dl.

Any employee with a BLL above 50 µg / dl shall receive a follow-up BLL within 2 weeks after Sunbelt Controls receives the results of the first test.

For those employees temporarily removed from their jobs involving lead exposure, a BLL and ZPP must be provided every month during the removal period.

All analysis of blood samples shall be conducted by a laboratory approved by OSHA.

Sunbelt Controls shall notify all employees, in writing, of their blood sampling results within 5 working days after receipt of the results.

5.2 Medical Examinations and Consultations

A medical exam shall be provided annually for all employees who had a BLL at or above 40 µg / dl during the preceding 12 months.

A medical exam shall be provided to any employee who reports signs or a symptom(s) related to lead poisoning, desires medical advice regarding the effects of lead exposure on the employee's ability to produce a healthy child, is pregnant, or has difficulty breathing while wearing a respirator.

A medical exam shall be provided as medically appropriate to any employee removed from his/her usual job involving exposure to lead.

A medical exam shall include: detailed work history, with particular attention to past lead exposure; history and physical exam, with particular attention to teeth, gums, hematologic, gastrointestinal, renaL cardiovascular, neurological systems, and pulmonary system if respirators are used; blood pressure measurement; blood sample and analysis including BLL, ZPP, hemoglobin and hematocrit determinations, red cell indices, examination of peripheral smear morphology, blood urea nitrogen, serum creatinine; urinalysis with microscopic examination; pregnancy or male fertility evaluation, if requested by the employee; any other test deemed necessary by the physician.

5.3 Temporary Medical Removal and Return

Sunbelt Controls shall remove an employee from work having an exposure to lead at or above the AL on each occasion that a IILL and follow-up test is at or above 50 µg / dl

An employee who has been removed due to an elevated BLL can return to his/her former job after having two consecutive BLLs at or below 40 µg / dl.

Sunbelt Controls shall remove an employee from work having an exposure to lead at or above the AL on each occasion that a final medical determination results in a medical finding, determination, or opinion that the employee has a detected medical condition which places the employee at increased risk of material impairment to health from exposure to lead.

An employee who has been removed due to a final medical determination can return to his/her former job when a subsequent medical determination indicates he/she no longer has a medical condition which places that employee at increased risk of health impairment from exposure to lead.

5.4 Medical Removal Benefits

As long as the job the employee was removed from continues, Sunbelt Controls shall provide up to 18 months of benefits on each occasion that an employee is removed from exposure to lead. These benefits will include the normal earnings, seniority and other employment rights, and benefits, as though the employee had not been removed from the former job.

6.0 Employee Information and Training

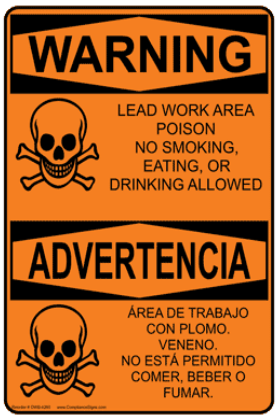
Sunbelt Controls shall provide training about lead hazards, according to the Hazard Communication Standard, for all employees potentially exposed to lead.

For all employees who maybe exposed to lead at or above the AL on any day, exposed to lead compounds that can cause eye or skin irritation, or who perform any of the specified trigger tasks, Sunbelt Controls shall provide initial (pre-placement) training that includes: the content of the Title 8 of the California Code of Regulations, Section 1532.1 OSHA 29 CFR 1926.62 lead in construction standard and appendices; the operations that may cause lead exposure> AL; the purpose, proper selection, fitting, use and limitations of respirators; the purpose and description of the medical surveillance program, including the adverse health effects of lead exposure (especially on reproduction); the engineering controls and work practices relevant to the employee's job assignment; the contents of any compliance plan in effect; the prohibition against routine use of chelation agents; the employee's right of access to records.

Annual refresher training is required for employees that are subject to potential lead exposure at, or above the action level on any day.

6.1 Signs

In work areas where employee exposure is >PEL, Sunbelt Controls shall post warnings sign with the words:



7.0 Record Keeping

Sunbelt Controls is required to maintain detailed records on exposure assessment, including any objective data used for exemption from air monitoring requirements, medical surveillance and medical removals.

7.1 Respiratory Protection for Airborne Lead

1 HEPA = High Efficiency Particulate Air filter that is 99.97% effective against particles 0.3 µg or larger2 PAPR = Powered Air Purifying Respirator3 SCBA = Self Contained Breathing Apparatus

Respiratory Protection for Airborne Lead

TABLE 1

Task Level	Airborne Lead Levels	Required Respirator
Level 1 Lowest Exposure	Not in excess of 500 µg / m³ (Up to 10 x PEL)	½ mask air purifying respirator with HEPA[1]
		½ mask supplied air respirator in negative pressure mode
Level 2 Medium Exposure	Not in excess of 1,250 µg / m³ (Up to 25 x PEL)	Loose fitting hood or helmet PAPR[2] with HEPA
		Hood or Helmet supplied air in continuous supply mode
	Not in excess of 2,500 µg / m³ (Up to 50 x PEL)	Full-Face air purifying with HEPA
		Tight Fitting PAPR with HEPA
		Half-Face or Full-Face supplied air in continuous flow mode
		Full-Face supplied air in demand mode
		Full-Face SCBA[3] in positive pressure Mode
Level 3 Highest Exposure	Not in excess of 50,000 µg / m³ (Up to 1,000 x PEL)	Half-Face supplied air in positive pressure mode
	Not in excess of 100,000 µg / m³ (Up to 2,000 x PEL)	Full-Face supplied air in positive pressure mode
	Greater than 100,000 µg / m³	Full-Face SCBA in positive pressure mode