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- **Part Number:** 1910
- **Part Title:** Occupational Safety and Health Standards
- **Subpart:** H
- **Subpart Title:** Hazardous Materials
- **Standard Number:** 1910.124
- **Title:** General requirements for dipping and coating operations

1910.124(a)

What construction requirements apply to dip tanks? Any container that you use as a dip tank must be strong enough to withstand any expected load.

1910.124(b)

What ventilation requirements apply to vapor areas?

1910.124(b)(1)

The ventilation that you provide to a vapor area must keep the airborne concentration of any substance below 25% of its LFL.

1910.124(b)(2)

When a liquid in a dip tank creates an exposure hazard covered by a standard listed in subpart Z of this part, you must control worker exposure as required by that standard.

1910.124(b)(3)

You may use a tank cover or material that floats on the surface of the liquid in a dip tank to replace or supplement ventilation. The method or combination of methods you choose must maintain the airborne concentration of the hazardous material and the worker's exposure within the limits specified in paragraphs (b)(1) and (b)(2) of this section.

1910.124(b)(4)

When you use mechanical ventilation, it must conform to the following standards that are incorporated by reference as specified in §1910.6:

1910.124(b)(4)(i)

ANSI Z9.2-1979, Fundamentals Governing the Design and Operation of Local Exhaust Systems;

1910.124(b)(4)(ii)

FPA 34-1995, Standard for Dip Tanks Containing Flammable or Combustible Liquids;

1910.124(b)(4)(iii)

ACGIH's "Industrial Ventilation: A Manual of Recommended Practice" (22nd ed., 1995); or

1910.124(b)(4)(iv)

ANSI Z9.1-1971, Practices for Ventilation and Operation of Open-Surface Tanks, and NFPA 34-1966, Standard for Dip Tanks Containing Flammable or Combustible Liquids.

1910.124(b)(5)

When you use mechanical ventilation, it must draw the flow of air into a hood or exhaust duct.

1910.124(b)(6)

When you use mechanical ventilation, each dip tank must have an independent exhaust system unless the combination of substances being removed will not cause a:

1910.124(b)(6)(i)

Fire;

1910.124(b)(6)(ii)

Explosion; or

1910.124(b)(6)(iii)

Chemical reaction.

1910.124(c)

What requirements must I follow to recirculate exhaust air into the workplace?

1910.124(c)(1)

You may not recirculate exhaust air when any substance in that air poses a health hazard to employees or exceeds 25% of its LFL.

1910.124(c)(2)

You must ensure that any exhaust air re-circulated from a dipping or coating operation using flammable liquids or liquids with flashpoints greater than 199.4 °F (93 °C) is:

1910.124(c)(2)(i)

Free of any solid particulate that poses a health or safety hazard for employees; and

1910.124(c)(2)(ii)

Monitored by approved equipment.

1910.124(c)(3)

You must have a system that sounds an alarm and automatically shuts down the operation when the vapor concentration for any substance in the exhaust airstream exceeds 25% of its LFL.

1910.124(d)

What must I do when I use an exhaust hood? You must:

1910.124(d)(1)

Provide each room having exhaust hoods with a volume of outside air that is at least 90 percent of the volume of the exhaust air; and

1910.124(d)(2)

Ensure that the outside air supply does not damage exhaust hoods.

1910.124(e)

What requirements must I follow when an employee enters a dip tank? When an employee enters a dip tank, you must meet the entry requirements of §1910.146, OSHA's standard for Permit-Required Confined Spaces, as applicable.

1910.124(f)

What first-aid procedures must my employees know? Your employees must know the first-aid procedures that are appropriate to the dipping or coating hazards to which they are exposed.

1910.124(g)

What hygiene facilities must I provide? When your employees work with liquids that may burn, irritate, or otherwise harm their skin, you must provide:

1910.124(g)(1)

Locker space or other storage space to prevent contamination of the employee's street clothes;

1910.124(g)(2)

An emergency shower and eye-wash station close to the dipping or coating operation. In place of this equipment, you may use a water hose that is at least 4 feet (1.22 m) long and at least $\frac{3}{4}$ of an inch (18 mm) thick with a quick-opening valve and carrying a pressure of 25 pounds per square inch (1.62 k/cm²) or less; and

1910.124(g)(3)

At least one basin with a hot-water faucet for every 10 employees who work with such liquids. (See paragraph (d) of §1910.141.)

1910.124(h)

What treatment and first aid must I provide? When your employees work with liquids that may burn, irritate, or otherwise harm their skin, you must provide:

1910.124(h)(1)

A physician's approval before an employee with a sore, burn, or other skin lesion that requires medical treatment works in a vapor area;

1910.124(h)(2)

Treatment by a properly designated person of any small skin abrasion, cut, rash, or open sore;

1910.124(h)(3)

Appropriate first-aid supplies that are located near the dipping or coating operation; and

1910.124(h)(4)

For employees who work with chromic acid, periodic examinations of their exposed body parts, especially their nostrils.

1910.124(i)

What must I do before an employee cleans a dip tank? Before permitting an employee to clean the interior of a dip tank, you must:

1910.124(i)(1)

Drain the contents of the tank and open the cleanout doors; and

1910.124(i)(2)

Ventilate and clear any pockets where hazardous vapors may have accumulated.

1910.124(j)

What must I do to inspect and maintain my dipping or coating operation? You must:

1910.124(j)(1)

Inspect the hoods and ductwork of the ventilation system for corrosion or damage:

1910.124(j)(1)(i)

At least quarterly during operation; and

1910.124(j)(1)(ii)

Prior to operation after a prolonged shutdown.

1910.124(j)(2)

Ensure that the airflow is adequate:

1910.124(j)(2)(i)

At least quarterly during operation; and

1910.124(j)(2)(ii)

Prior to operation after a prolonged shutdown.

1910.124(j)(3)

Periodically inspect all dipping and coating equipment, including covers, drains, overflow piping, and electrical and fire-extinguishing systems, and promptly correct any deficiencies;

1910.124(j)(4)

Provide mechanical ventilation or respirators (selected and used as specified in § 1910.134, OSHA's Respiratory Protection standard) to protect employees in the vapor area from exposure to toxic substances released during welding, burning, or open-flame work; and

1910.124(j)(5)

Have dip tanks thoroughly cleaned of solvents and vapors before permitting welding, burning, or open-flame work on them.

[77 FR 17777, March 26, 2012]

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