

**** CAUTION ****

SUMMARY

The document outlines the safety measures and protocols for abrasive blasting operations, emphasizing the importance of engineering controls, administrative controls, personal protective equipment (PPE), and training.

- **Hearing Protection**: Abrasive blasting generates high noise levels that can cause hearing loss, necessitating the use of hearing protection and a hearing conservation program administered by the company.
- **Hazard Identification**: Before starting work, the company identifies hazards and assigns a trained person to recognize and eliminate them.
- **Engineering Controls**: Engineering controls such as substitution, isolation, containment, and ventilation are used to prevent or reduce airborne hazards during abrasive blasting.
- Administrative Controls: Administrative controls include good work and personal hygiene practices, routine cleanup, and scheduling blasting when fewer employees are present.
- **Personal Hygiene Practices**: Personal hygiene practices involve prohibiting eating, drinking, or using tobacco in blasting areas and providing wash stations and accommodations for end-of-shift showers.

- **Respiratory Protection**: The respiratory protection program includes the use of NIOSH-approved respirators and ensures air for respirators is free of harmful substances.
- **Personal Protective Equipment (PPE)**: The company provides equipment for eye and face protection, hearing protection, helmets, leather gloves, and safety shoes or boots.
- **Manufacturer's Safety Data Sheets**: The company obtains and reads the manufacturer's Safety Data Sheets (SDS) for health information on the abrasive blasting materials used.
- **General Rules**: General rules include not using compressed air for cleaning purposes, equipping blast nozzles with operating valves, and ensuring local exhaust ventilation prevents harmful exposure.
- **Training**: The Company provides training to abrasive blasters and support personnel on health and safety hazards, use of controls, personal hygiene practices, and the use of PPE and respirators.

POLICY

Abrasive blasting creates high levels of noise that can cause substantial hearing loss. Always wear hearing protection. The Company administers a hearing conservation program as required by the OSHA Occupational Noise standard.

Abrasive blasting uses compressed air or water to direct a high velocity stream of an abrasive material to clean an object or surface, remove burrs, apply a texture, or prepare a surface for the application of paint or other type of coating. The Company protects its employees from hazardous dust levels and toxic metals that may be generated from both the blasting material and the underlying substrate and coatings being blasted.

Abrasive blasting creates high levels of noise that can cause substantial hearing loss. Employees are required wear hearing protection. The Company has a Hearing Conservation program in place.

Before beginning work, the Company identifies the hazards and assigns a knowledgeable person trained to recognize hazards who has the authority to quickly take corrective action to eliminate the hazards.

The Company uses engineering and administrative controls, personal protective equipment (PPE), including respiratory protection, and training to protect its employees involved in abrasive blasting activities.

Engineering controls, such as substitution, isolation, containment, and ventilation are the primary means of preventing or reducing exposures to airborne hazards during abrasive blasting operations. Administrative controls, including the use of good work and personal hygiene practices, can also reduce exposure. When engineering and

administrative controls cannot keep exposures to hazardous materials below OSHA permissible exposure limits, The Company has a Respiratory Protection policy that will be used to ensure respiratory protection.

The Company does not allow exposure of employees to inhalation, ingestion, skin absorption, or contact with any material or substance at a concentration above those specified in the "Threshold Limit Values of Airborne Contaminants for 1970" of the American Conference of Governmental Industrial Hygienists.

The Company uses the following engineering controls, as necessary:

- Substitution:
 - Using a less toxic abrasive blasting material.
 - Using abrasives that can be delivered with water (slurry) to reduce dust.
- Isolation and Containment:
 - Using barriers and curtain walls to isolate the blasting operation from other employees.
 - Using blast rooms or blast cabinets for smaller operations.
 - Using restricted areas for non-enclosed blasting operations.
 - Keeping co-employees away from the blaster.
- Ventilation:
 - Using exhaust ventilation systems in containment structures to capture dust.

The Company requires the use of the following administrative controls, as necessary:

- Performing routine cleanup using wet methods or HEPA filtered vacuuming to minimize the accumulation of toxic dusts.
- Not using compressed air to clean as this creates dust in the air.
- Cleaning and decontaminating tarps and other equipment on the worksite.
- Scheduling blasting when the least number of employees are at the site.
- Avoiding blasting in windy conditions to prevent the spread of any hazardous materials.

The Company requires the use of the following personal hygiene practices, as necessary:

- Prohibiting eating, drinking, or using tobacco products in blasting areas.
- Providing wash stations so employees can wash their hands and face routinely and before eating, drinking, or smoking.
- Vacuuming or removing contaminated work clothes before eating, drinking or smoking.
- Providing accommodations for end-of-shift showers and change areas with separate storage facilities for street clothes, protective clothing and equipment.
- Keeping contaminated clothing and equipment out of the clean change area.

Abrasives and surface coatings on the materials blasted are shattered and pulverized during blasting operations and the dust formed will contain particles of respirable size.

The composition and toxicity of the dust from these sources will be considered in making an evaluation of the potential health hazards.

The Company's respiratory protection program establishes when it is necessary to use respiratory protective equipment including worksite-specific procedures and elements for required respirator use. Abrasive blasting respirators will be worn by all abrasive blasting operators under certain conditions.

The Company requires the use of the following respiratory protection, as necessary:

- An abrasive-blasting respirator will cover the wearer's head, neck, and shoulders to protect the wearer from rebounding abrasive.
- Employees will use only respirators approved by NIOSH to provide protection from dusts produced during abrasive-blasting operations. Type CE NIOSH-certified blasting airline respirator with positive pressure blasting helmet.
- Support personnel involved in cleanup and other related activities may also need respiratory protection.
- Air for abrasive blasting respirators will be free of harmful quantities of dusts, mists or noxious gases.
- The Company provides equipment for the protection of the eyes and face of operators and any other personnel working in the vicinity of abrasive blasting operations as required or when the respirator design does not provide such protection. The Company requires the use of the following personal protective equipment (PPE), as necessary:
- Hearing protection
- Eye and face protection
- Helmet
- Leather gloves that protect to full forearm and aprons (or coveralls)
- Safety shoes or boots

The Company obtains and reads the manufacturer's Safety Data Sheets (SDS) for health information on the abrasive blasting materials used.

General Rules:

- Compressed air will not be used for cleaning purposes except where reduced to less than 30 p.s.i. and then only with effective chip guarding and personal protective equipment.
- Blast cleaning nozzles will be equipped with an operating valve which will be held open manually or have a 'deadman valve. A support will be provided on which the nozzle may be mounted when not in use.
- Blast nozzles will be bonded and grounded to prevent the build up of static charges.
- Whenever hazardous substances such as dusts, fumes, mists, vapors, or gases exist or are produced during construction work, their concentrations will not exceed the specified limits.
- Local exhaust ventilation will be designed to prevent dispersion into the air of dusts, fumes, mists, vapors, and gases in concentrations causing harmful exposure.

- Abrasive-blasting respirators will be worn by all abrasive-blasting operators:
- Operators will be equipped with heavy canvas or leather gloves and aprons or equivalent protection to protect them from the impact of abrasives.
- Safety shoes will be worn to protect against foot injury where heavy pieces of work are handled.
- Equipment for protection of the eyes and face will be supplied to the operator when the respirator design does not provide such protection and to any other personnel working in the vicinity of abrasive blasting operations.

TRAINING

The Company will provide training to abrasive blasters and support personnel on blasting health and safety hazards, how to use controls, personal hygiene practices, safe work practices and the use of PPE and respirators.

The Company will obtain and read the manufacturer's SDS for health hazard information on the abrasive blasting material being used.

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• These regulations and related materials are ... continually under development. The user should be aware that, while we try to keep the information on our Web site timely and accurate, there will often be a delay between official publication of the materials and their appearance or modification on these pages. TheCompany will make every effort to correct errors brought to our attention.

Company Disclaimer:

- The following has been developed to reduce hazards likely to cause injuries to our employees.
- Some of the following policies may not be applicable to our operations. This manual serves as a guideline and is subject to change or modification as particular circumstances warrant.
- Employees should contact their immediate supervisor or senior management with questions.
- If there are conflicts with local, state or federal regulations or the Company's Employee Handbook or other Company documents, the local, state or federal regulations, the Company Employee Handbook or other Company documents will prevail.

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Reference OSHA Standards:

- Refer to the OSHA standards and updates issued by OSHA for the most accurate information.
- This document is based on OSHA's <u>Training Requirements in OSHA</u> <u>Standards</u> document.
- When there is a conflict between the contents in this document and, as applicable, <u>OSHA 29 CFR Part 1926 Safety and Health Regulations for</u> <u>Construction</u> or <u>OSHA 29 CFR Part 1910 Safety and Health Regulations for</u> <u>General Industry</u>, the OSHA standards and other regulatory updates will prevail.