



HEALTH AND SAFETY MANUAL

HAZARD RECOGNITION AND CONTROL

PURPOSE

The purpose of this Safety Program is to provide a systematic approach to identifying, evaluating, and controlling workplace hazards in all phases of construction, maintenance, and pavement operations. This program ensures compliance with **OSHA 29 CFR 1910 (General Industry)** and **1926 (Construction)** standards, protecting employees from injury, illness, and property damage.

SCOPE

This program applies to all personnel, subcontractors, and visitors involved in the following activities:

- Excavation and trenching
- Fencing installation
- Grating and milling pavement
- Turf placement
- Cement/concrete operations
- Sealcoating and pavement spraying
- Road marking and painting

RESPONSIBILITIES

Management

- Ensure compliance with OSHA standards.
- Provide necessary PPE, training, and equipment.
- Conduct periodic audits of hazard control measures.

Supervisors and Foremen

- Identify and evaluate hazards on the worksite.
- Enforce safety rules and safe work practices.
- Investigate incidents and near-misses.

Employees

- Follow safe work procedures.
- Wear required PPE at all times.
- Report unsafe conditions or hazards immediately.

HAZARD RECOGNITION & ASSESSMENT

General Hazard Identification

- Conduct pre-job hazard assessments before starting work.



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- Identify hazards related to:
 - Heavy machinery
 - Traffic control
 - Falls, trips, slips
 - Confined spaces
 - Hazardous chemicals (sealcoating, paints)

Task-Specific Hazard Recognition

Task	Typical Hazards	OSHA References
Excavation & Trenching	Cave-ins, falling loads, underground utilities, water accumulation	1926 Subpart P
Fencing	Strains, lacerations, punctures	1910.212, 1926.501
Grating/Milling Pavement	Flying debris, dust, noise, machine hazards	1926.600, 1910.95
Turf Placement	Heat stress, heavy lifting	1910.151, 1926.21
Cement Work	Chemical burns, skin irritation, silica exposure	1910.1000, 1926.55
Sealcoating/Pavement Spraying	Fumes, fire hazards, skin/eye exposure	1910.1200, 1926.21
Road Painting	Traffic hazards, chemical exposure, slips	1926.200, 1910.178

HAZARD CONTROL MEASURES

Engineering Controls

- Guardrails, trench boxes, and shoring for excavation/trenching.
- Ventilation for enclosed work areas (sealcoating, spraying).
- Dust suppression systems during milling.

Administrative Controls

- Job hazard analyses (JHA) for each task.
- Safety signage and barriers for pedestrian/vehicle separation.
- Permit-to-work systems for confined spaces and high-risk tasks.

Personal Protective Equipment (PPE)

- Hard hats, safety glasses, gloves, steel-toed boots.
- High-visibility clothing for all worksites.



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- Respirators for chemical exposures and dust.
- Hearing protection in noisy operations.

Safe Work Practices

- Lockout/tagout for machinery maintenance.
- Proper lifting techniques and ergonomic practices.
- Regular equipment inspection and maintenance.
- Traffic control plans for road work.

TRAINING REQUIREMENTS

Training	Audience	Frequency	Reference
OSHA 10	All employees	Initial	1926.21
Excavation & Trenching	Excavation crews	Initial & refresher	1926.650
PPE Use	All employees	Initial	1910.132
Hazard Communication	All employees	Initial & annual	1910.1200
Equipment Operation	Operators	Initial & periodic	1926.602

EMERGENCY RESPONSE & INCIDENT REPORTING

- Establish emergency procedures for trench collapse, chemical spills, or vehicle incidents.
- Maintain first aid kits and trained personnel on site.
- Report all incidents, near misses, and unsafe conditions immediately.

RECORDKEEPING

- Maintain OSHA-required logs (OSHA 300/301 forms).
- Document JHAs, training records, equipment inspections, and incident investigations.
- Retain records in compliance with OSHA retention schedules.

PROGRAM REVIEW & CONTINUOUS IMPROVEMENT

- Conduct quarterly audits to assess program effectiveness.
- Review accidents and near misses for trend analysis.
- Update safety procedures based on lessons learned and regulatory changes.

REFERENCES

- **29 CFR 1910 – General Industry Standards**
- **29 CFR 1926 – Construction Standards**
- ANSI/ASSE A10 series – Construction and Demolition Safety
- NIOSH publications relevant to construction and roadwork