USDA
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Construction Equipment Operation Safety

NRCS and OSHA Policy



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List of Topics

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Shameless plug for our first webinar

OSHA Requirements, Agency Policy, and General Safety Guidelines for Field Office Activities

★★★★☆

You can view this archived webinar at any time.

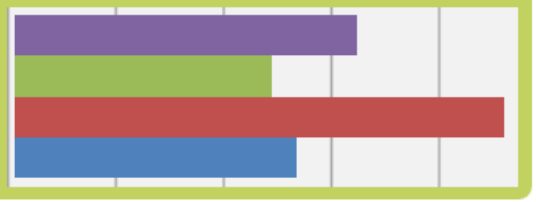
Participate to learn about Occupational Safety and Health Administration (OSHA) Requirements, agency policy and general safety guidelines applicable to NRCS employees and contractors in field office operations.

NOTE: This webinar will count as 1 CLP of COR maintenance credit for those who currently have a Contracting Officer's Representative certification through FAITAS. Check to earn CEUs during sign-in, use "Step 2" after the webinar to take the quiz and receive your certificate, and submit your CEUs directly to the certification provider.

Participants in this training will become familiar with mandatory OSHA requirements applicable for field office operations as well as current agency policy

Green Savings!

Click on the graph below or click **here** for a detailed Green Savings analysis of this webinar.



http://www.conservationwebinars.net/ Search "OSHA"

What is our responsibility as an NRCS employee?

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NRCS Supplement to OSHA

Appendix F

NRCS Supplement to OSHA Parts 1910 and 1926

The NRCS Supplement to OSHA Parts 1910 and 1926 is included in NRCS construction contracts and recommended for other contracts, such as CLO contracts, in which the NRCS is involved. It contains requirements that are not included in the OSHA requirements. It also emphasizes specific safety requirements that are covered in OSHA Parts 1910 and 1926.

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NRCS Supplement to OSHA

5.0 MACHINERY AND MECHANIZED EQUIPMENT:

5.1 SAFE CONDITION. Before any machinery or mechanized equipment is initially used on the job, it must be inspected and tested by qualified personnel and determined to be in safe operating condition and appropriate for the intended use. Operators shall inspect their equipment prior to the beginning of each shift. Any deficiencies or defects shall be corrected prior to using the equipment. Safety equipment, such as seatbelts, installed on machinery is to be used by equipment operators.

5.2 TAGGING AND LOCKING. The controls of power-driven equipment under repair are to be locked. An effective lockout and tagging procedure is to be established, prescribing specific responsibilities and safety procedures to be followed by the person or persons performing repair work. Mixer barrels are to be securely locked out before permitting employees to enter them for cleaning or repair.

NRCS Supplement to OSHA

5.3 HAUL ROADS FOR EQUIPMENT

5.3.1 ROAD MAINTENANCE. The Contractor shall maintain all roadways, including haul roads and access roads, in a safe condition so as to eliminate or control dust and ice hazards. Wherever dust is a hazard, adequate dust-laying equipment shall be available at the jobsite and utilized to control the dust.

Do we have a dust problem?

The road must be passable and safe for us to ingress and inspect the site.

5.3.2 Single-Lane Haul Roads. Single-lane haul roads with two-way traffic shall have adequate turnouts. Where turnouts are not practical, a traffic control system shall be provided to prevent accidents.

5.3.3 Two-Way Hauls Roads. On two-way haul roads, arrangements are to be such that vehicles travel on the right side whenever possible. Signs and traffic control devices are to be employed to indicate clearly any variations from a right-handed traffic pattern. The road shall be wide enough to permit safe passage of opposing traffic, considering the type of hauling equipment used.

5.3.4 Design and Construction of Haul Roads. Haul road design criteria and drawings, if requested by the Contracting Officer are to be submitted for approval prior to road construction. Sustained grades shall not exceed 12 percent and all curves shall have open-sight line with as great a radius as practical. All roads shall be posted with curve signs and maximum speed limits that will permit equipment to be stopped within one-half the minimum sight distance.

5.3.5 Operators. Machinery and mechanized equipment shall be operated only by authorized qualified persons.

5.3.6 RIDING ON EQUIPMENT. Riding on equipment by unauthorized personnel is prohibited. Seating and safety belts shall be provided for the operator and all passengers.

5.3.8 HOURS OF OPERATION. Except in emergencies, an equipment operator shall not operate any mobile or hoisting equipment for more than 12 hours without an 8-hour rest interval away from the job.

5.4 POWER CRANES AND HOISTS (TRUCK CRANES, CRAWLER CRANES, TOWER CRANES, GANTRY CRANES, HAMMERHEAD CRANES, DERRICKS, CABLEWAYS, AND HOISTS)

5.4.1 PERFORMANCE TEST. Before initial onsite operation, at 12-month intervals, and after major repairs or modification, power cranes, derricks, cableways, and hoists must satisfactorily complete a performance test to demonstrate the equipment's ability to safely handle and maneuver the rated loads. The tests shall be conducted in the presence of a representative of the Contracting Officer. Test data shall be recorded and a copy furnished the Contracting Officer.

5.4.2 PERFORMANCE TEST—POWER CRANES (Crawler mounted, truck mounted and wheel mounted). The performance test is to be carried out as per ANSI requirements. The test is to consist of raising, lowering, and braking the load and rotating the test load through 360° degrees at the specified boom angle or radius. Cranes equipped with jibs or boom-tip extensions are to be tested using both the main boom and the jib, with an appropriate test load in each case.

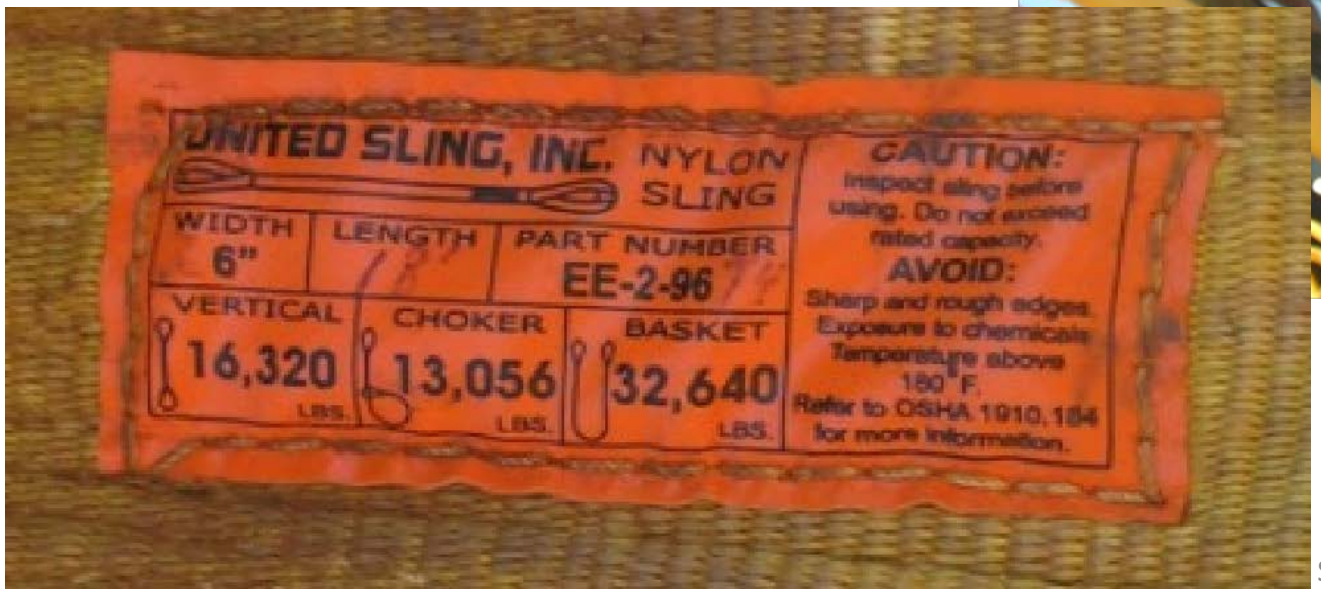
5.4.3 PERFORMANCE TEST—DERRICKS, GANTRY CRANES, TOWER CRANES, CABLEWAYS, AND HOISTS, INCLUDING OVERHEAD CRANES. This equipment is to be performance tested as per ANSI requirements.

5.4.4 BOOM ANGLE INDICATOR. Power cranes (includes draglines) with booms capable of moving in the vertical plane shall be provided with a boom angle indicator in good working order.

5.4.5 CRANE TEST CERTIFICATION. The performance test required by 5.4.2 and 5.4.3 is fulfilled if the Contractor provides the Contracting Officer a copy of a certificate of inspection made within the past 12 months by a qualified person or by a government or private agency satisfactory to the Contracting Officer.


GROVE
Brady
Brady
405-262-3665
GROVE


UNITED SLING, INC. NYLON SLING
WIDTH 6"
LENGTH
PART NUMBER EE-2-96
VERTICAL 16,320 LBS.
CHOKER 13,056 LBS.
BASKET 32,640 LBS.
CAUTION: Inspect sling before using. Do not exceed rated capacity.
AVOID: Sharp and rough edges. Exposure to chemicals. Temperature above 180° F.
Refer to OSHA 1910.184 for more information.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TWIN CITY TRAILER
UTILITY
No. Little Rock, AR
Texarkana, AR
Shreveport, LA
TWIN CITY TRAILER
UTILITY
No. Little Rock, AR
Texarkana, AR
Shreveport, LA


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KOMATSU
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KOMATSU

5.4.6 POSTING FOR HIGH VOLTAGE LINES. A notice of the 10-foot (or greater) clearance required by OSHA 1926.550, Subpart N, shall be posted in the operator's cab of cranes, shovels, boom-type concrete pumps, backhoes, and related equipment.

5.4.7 BOOM STOPS. Cranes or derricks with cable-supported booms, except draglines, shall have a device attached between the gantry of the A-frame and the boom chords to limit the elevation of the boom. The device shall control the vertical motions of the boom with increasing resistance from 83° or less, until completely stopping the boom at not over 87° above horizontal.

5.4.8 SAFETY HOOKS. Hooks used in hoisting personnel or hoisting loads over construction personnel or in the immediate vicinity of construction personnel shall be forged steel equipped with safety keepers. When shackles are used under these conditions, they shall be of the locking type or have the pin secured to prohibit turning.

5.5 ROLLOVER PROTECTIVE STRUCTURES (ROPS)

5.5.1 ROLLOVER PROTECTIVE STRUCTURES. OSHA 1926, Subpart W, Overhead Protections, Sections 1001 and 1002 are applicable regardless of the year in which the equipment was manufactured and regardless of the struck capacity of the equipment.

5.5.2 EQUIMENT REQUIREING ROPS. The requirement for ROPS meeting 5.5.1 above applies to crawler and rubber-tired tractors such as dozers, push-an-pull tractors, winch tractors, tractors with backhoes, and mowers: off-highway, self-propelled, pneumatic-tired earthmovers, including scrapers, motor graders and loaders; and roller, compactors, water tankers (excluding trucks with cabs). There requirements also apply to agricultural and industrial tractors and similar equipment.


ROPS: SAEJ1040 MAY94, ISO3471:1994
FOPS: ISO3449:1992 LEVEL II
kg
16 133
LB
35,567
735, 740, 740EJ
263-4749
CATERPILLAR INC.
PEORIA, ILLINOIS USA


302


CATERPILLAR
613C


EAGLE


CONSTRUCTION
TRAILER
SPECIALISTS INC
888-669-0003
CONSTRUCTION
TRAILER
SPECIALISTS INC
888-669-0003


DEERE
JOHN DEERE

5.5.3 EQUIPMENT REQUIRING SEATBELTS. The requirements for seatbelts as specified in OSHA Subpart 0, Motor Vehicles, Mechanized Equipment, and Marine Operations, Section 1926.602 shall also apply to self-propelled compactors and rollers, and rubber-tired skid-steer equipment.

If it is required to have ROPS, it is required to have seatbelts! If it has seatbelts, operators are required to wear them.


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OSHA 1926.602 No employer shall permit earthmoving or compacting equipment which has an obstructed view to the rear to be used in reverse gear unless the equipment has in operation a reverse signal alarm distinguishable from the surrounding noise level or an employee signals that it is safe to do so.

OSHA 1926.604 All equipment used in site clearing operations shall be equipment with rollover guards meeting the requirements of this subpart. In addition, rider-operated equipment shall be equipped with an overhead and rear canopy guard meeting the following requirements:

The overhead covering on the canopy shall be of not less that 1/8-inch plate steel plate or 1/4-inch woven wire mesh with openings no greater than 1 inch, or equivalent.

The openings in the rear of the canopy structure shall be covered with not less than 1/4-inch woven wire mesh with openings no greater than 1 inch.

Unintended Uses of Equipment


T300
Bobcat


332

Other Equipment Safety Issues


SCHOOL BUS
STOP ON SIGNAL
POWER STROKE
21 4:59 PM


MANHATTAN

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Where to Get More Information

- NRCS General Manual
  - http://directives.sc.egov.usda.gov/default.aspx
- National Engineering Manual (NEM)
  - http://directives.sc.egov.usda.gov/RollupViewer.aspx?hid=27418
- NRCS National Engineering Handbook (NEH) Part 645
  - http://directives.sc.egov.usda.gov/viewerFS.aspx?hid=31701
- Occupational Safety and Health Admin.
  - web site: www.osha.gov
- Conservation Webinars (Search for OSHA)
  - http://conservationwebinars.net/