

LOG HAULING, LOADING & LOGGING EQUIPMENT SAFETY HANDBOOK

LOGGING OPERATIONS • LOG LOADING • TRANSPORT • MOBILE EQUIPMENT

Federal OSHA & DOT/FMCSA Compliance Resource

Prepared for

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Revision

Approved By

1.0 - Logging Operations Edition

This handbook is a customizable safety resource. It does not replace the employer's site-specific hazard assessment, equipment manufacturer instructions, applicable state-plan rules, motor-carrier obligations, contracts, or legal advice. Applicability must be determined for the actual operation.

Document Control and Regulatory Boundary

This handbook centers on log hauling, loading and unloading, landings, log decks, transport, and the logging machines and vehicles that support those activities. It also addresses related employee protection, inspections, maintenance, training, emergency response and fleet controls.

Primary Federal Framework

OSHA 29 CFR 1910.266 is the primary federal logging standard. It covers logging operations from tree/log movement through loading, unloading, storage and transport to the point of delivery, and includes requirements for PPE, first aid, machines, vehicles, loading/unloading, transport and training. DOT/FMCSA rules may also apply when log trucks operate as commercial motor vehicles on public roads.

Jurisdiction and State Rules

State-plan OSHA states, state motor-carrier rules, weight/size rules, forest-practice requirements and public-road restrictions may be more specific. Management should maintain a regulatory matrix for every state and operating area.

Emergency Contacts

Supervisor / Employee Verification Checklist

Verification Item
Emergency: 911
Company Dispatch: _____
Safety Director: _____
Nearest Emergency Medical Facility: _____
Towing/Recovery Contact: _____
Environmental/Spill Contact: _____

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SECTION I

Leadership, Compliance & Worker Protection

Chapters 1–4

Section Overview

Establishes the management system for logging safety: leadership accountability, regulatory applicability, worksite planning, PPE, first aid, training, competency, emergency readiness and required monthly safety meetings.

SAFETY • CONTROL • ACCOUNTABILITY

SAFETY POLICY & MANAGEMENT COMMITMENT

Chapter Overview. Establishes management and employee responsibilities for preventing struck-by, caught-between, rollover, equipment, loading and roadway incidents.

SAFETY IS OUR CORE VALUE

Purpose

Create a documented safety system that assigns authority, resources and accountability and gives employees clear stop-work authority.

Scope

All employees, supervisors, contractors and visitors exposed to company logging, loading, hauling, landing, yard or equipment-support activities.

Management Responsibilities

Management should assign qualified supervision, provide serviceable equipment, correct recognized hazards, and verify that written requirements are implemented in the field.

- Set measurable safety objectives and review trends.
- Track corrective actions to closure.
- Protect good-faith injury and hazard reporting from retaliation.
- Coordinate responsibilities with landowners, mills, contractors and motor carriers.

Employee Responsibilities

Employees must work within training and authorization, use required protection, inspect assigned equipment and promptly report unsafe conditions.

- Never enter an active machine or loading hazard zone without authorization.
- Use seat belts where required and never bypass guards or alarms.
- Stop work when conditions are unsafe or unclear.

Stop-Work Authority

Any employee may stop a task when an uncontrolled hazard, equipment defect, unstable load, unsafe weather or communication failure could cause injury. Work resumes only after the condition is evaluated and controlled.

Supervisor / Employee Verification Checklist

Verification Item

Policy issued and understood

Responsibilities assigned

Stop-work authority understood

Corrective actions tracked

Contractor coordination addressed

Required Records

- Signed policy
- Safety meeting records
- Corrective-action log
- Employee acknowledgments

Key Federal References

OSH Act §5(a)(1); 29 CFR 1910.266

REGULATORY COMPLIANCE & WORKSITE PLANNING

Chapter Overview. Defines how OSHA logging requirements, DOT/FMCSA obligations and state-specific rules are identified before work begins.

SAFETY IS OUR CORE VALUE

Purpose

Maintain a current compliance matrix and convert regulatory requirements into practical site and fleet controls.

Scope

Logging operations, landings, loading/unloading, log transport, support vehicles and equipment movement.

OSHA Logging Standard

29 CFR 1910.266 applies to logging operations and specifically addresses machines, vehicles, loading/unloading, transport, training and other hazards. Hazards not specifically addressed remain subject to other applicable Part 1910 standards.

Worksite Planning

Before operations begin, identify access roads, landings, deck locations, slopes, overhead lines, traffic interaction, emergency access, communication limits and weather-related hazards.

- Define safe machine travel paths and loading zones.
- Identify who controls the landing and truck queue.
- Establish emergency coordinates or location information.
- Review public-road and bridge restrictions before dispatch.

Regulatory Matrix

Management should separately track OSHA, FMCSA/DOT, state OSHA-plan, state DOT, weight/size, environmental and contractual requirements.

Supervisor / Employee Verification Checklist

Verification Item

Applicable jurisdictions identified

Site plan completed

Emergency access identified

Public-road requirements reviewed

Regulatory matrix assigned

Required Records

- Regulatory matrix
- Site/landing plan
- Contractor coordination records
- Annual compliance review

Key Federal References

29 CFR 1910.266(b); 49 CFR Parts 390–397 as applicable

PPE, FIRST AID & EMERGENCY READINESS

Chapter Overview. Combines logging-specific PPE, first-aid kit placement, employee first-aid/CPR training and emergency response planning.

SAFETY IS OUR CORE VALUE

Purpose

Reduce injury severity and ensure prompt response in remote logging environments.

Scope

Employees working at landings, around logging machines, loading/unloading, maintenance areas and related logging work sites.

PPE Inspection and Use

Logging PPE must be maintained in serviceable condition and inspected before initial use during each workshift. Required protection depends on the task and may include head, eye/face, hearing, hand, foot and chain-saw leg protection.

- Replace damaged PPE before work begins.
- Use head and eye protection where falling/flying-object hazards exist.
- Select high-visibility apparel where vehicle interaction warrants it.

First-Aid Kits

Logging first-aid kits must be available at required locations, including active landings and employee transport vehicles, with contents suited to isolation, crew size and anticipated hazards.

First Aid and CPR

Employees, including supervisors, must receive and maintain current first-aid and CPR training meeting the logging standard's minimum requirements.

Emergency Plan

Crews should know how to summon EMS, identify the site, provide access, control equipment and preserve a safe rescue area.

Supervisor / Employee Verification Checklist

Verification Item

- PPE inspected each shift
- First-aid kits stocked
- First-aid/CPR certifications current
- Emergency location information available
- Communication method tested

Required Records

- PPE records
- First-aid/CPR certifications
- Kit inspection logs
- Emergency drill/meeting records

Key Federal References

29 CFR 1910.266(d)(1)–(2); 29 CFR 1910.266(i)(7); Appendices A and B to 1910.266

TRAINING, COMPETENCY & MONTHLY SAFETY MEETINGS

Chapter Overview. Establishes required logging training, close supervision for newly assigned employees, training certification and recurring safety meetings.

SAFETY IS OUR CORE VALUE

Purpose

Ensure employees can safely perform assigned work and operate the specific machines, tools and vehicles they use.

Scope

All employees and supervisors covered by the logging operation.

Training Triggers

Training is required before initial assignment, when new tasks/tools/equipment/machines/vehicles are assigned, and when unsafe job performance demonstrates a need for retraining.

Training Content

Training should cover safe task performance, equipment operation and maintenance instructions, hazard recognition and control, worksite procedures and applicable logging-standard requirements.

Close Supervision

Newly trained or newly assigned employees must work under close supervision of a designated person until they demonstrate ability to safely perform duties independently.

Certification and Meetings

Maintain the most recent written training certification. Hold safety and health meetings as necessary and at least monthly for each employee.

Supervisor / Employee Verification Checklist

Verification Item
Training completed before assignment
Equipment-specific competency verified
New employees closely supervised
Most recent certification retained
Monthly safety meetings documented

Required Records

- Training certifications
- Competency evaluations
- Monthly meeting records
- Retraining records

Key Federal References

29 CFR 1910.266(i)

SECTION II

Logging Machines & Equipment

Chapters 5–11

Section Overview

Addresses the machines, vehicles, powered tools and maintenance practices used to move, handle and load logs. It emphasizes pre-shift condition, designated operators, manufacturer limitations, protective structures, brakes, guarding, safe access and controlled maintenance.

SAFETY • CONTROL • ACCOUNTABILITY

GENERAL MACHINE SAFETY & PRE-SHIFT INSPECTIONS

Chapter Overview. Defines the baseline inspection, serviceability and operating rules for off-road logging machines and vehicles.

SAFETY IS OUR CORE VALUE

Purpose

Prevent operation of defective or unsafe logging equipment.

Scope

Log loaders, stackers, skidders, tractors, graders, dozers, forklifts, support machines and logging vehicles.

Beginning-of-Shift Inspection

Machines and vehicles must be inspected at the beginning of each workshift. Equipment with defects or damage affecting safe operation must not be used until corrected.

Manufacturer Instructions

Operating and maintenance instructions must be available in the machine or vehicle and followed by operators and mechanics.

Designated Operators

Logging machines may be started and operated only by designated employees. Rated capacities and manufacturer stability limitations must not be exceeded.

Movement Control

Before starting or moving a machine, the operator must determine that no employee is in its path and maintain sufficient separation from people and other machines.

Supervisor / Employee Verification Checklist

Verification Item

- Pre-shift inspection completed
- Unsafe defects removed from service
- Manual/instructions available
- Operator designated
- Rated capacity understood

Required Records

- Pre-shift inspection forms
- Defect reports
- Repair orders
- Operator authorization

Key Federal References

29 CFR 1910.266(f)(1)–(2); 29 CFR 1910.266(g)

ROPS, FOPS, CABS, ACCESS & SEAT BELTS

Chapter Overview. Addresses protective structures, enclosed cabs, safe access systems, second egress and restraint use on logging machines.

SAFETY IS OUR CORE VALUE

Purpose

Protect operators from rollover, falling-object, intrusion and access/egress hazards.

Scope

Applicable logging machines and vehicles.

Protective Structures

Covered tractors, skidders, swing yarders, log stackers, log loaders and mechanical felling devices placed into initial service after the regulatory date require specified FOPS and/or ROPS, subject to the standard's exceptions.

Cab Protection

Protective structures and cabs must be maintained. Required cab enclosure or canopy protection should prevent intrusion from limbs, objects and line hazards while preserving safe visibility.

Access and Egress

Provide compliant access systems where employees climb onto machines; maintain slip-resistant walking/working surfaces and a second means of cab egress.

Seat Belts

Seat belts and securely fastened seats must be used as required. Damaged restraints must be repaired or replaced before operation.

Supervisor / Employee Verification Checklist

Verification Item
ROPS/FOPS present where required
Cab protection intact
Access steps/handholds serviceable
Second egress usable
Seat belts inspected and used

Required Records

- Protective-structure inspection records
- Repair records
- Operator inspections

Key Federal References

29 CFR 1910.266(f)(3)–(5); 29 CFR 1910.266(d)(3)

BRAKES, GUARDING, EXHAUST & FIRE PROTECTION

Chapter Overview. Consolidates critical machine systems that prevent runaway movement, entanglement, burns and fires.

SAFETY IS OUR CORE VALUE

Purpose

Keep braking, guarding, exhaust and fire controls functional under logging conditions.

Scope

Powered logging machines, vehicles and maintenance areas.

Brakes

Service brakes must stop and hold the machine and rated load on operating slopes. Covered newer machines also require secondary and parking braking capability.

Guarding

Exposed shafts, pulleys, belts, gears and other moving elements must be guarded. Guards must remain in place during operation.

Exhaust

Exhaust must be directed away from the operator, guarded against contact and equipped as required with mufflers and spark arresters.

Fire Protection

Maintain required fire extinguishers and control accumulations of combustible debris, fuel leaks and ignition sources.

Supervisor / Employee Verification Checklist

Verification Item

- Brakes functional
- Parking brake holds
- Guards installed
- Exhaust/muffler serviceable
- Fire extinguisher charged and accessible

Required Records

- Inspection forms
- Brake repair records
- Guarding corrective actions
- Extinguisher inspections

Key Federal References

29 CFR 1910.266(f)(6)–(8); 29 CFR 1910.266(d)(4),(9)

LOG LOADERS, STACKERS & MATERIAL-HANDLING EQUIPMENT

Chapter Overview. Establishes safe operating expectations for machines that lift, swing, stack and place logs.

SAFETY IS OUR CORE VALUE

Purpose

Prevent struck-by, crushing, overload and stability incidents during mechanical log handling.

Scope

Log loaders, knuckleboom loaders, stackers, forklifts and similar material-handling machines.

Operating Envelope

Only designated operators may operate equipment. Keep employees out of swing, boom, grapple and suspended-load zones.

Stability and Capacity

Operate within manufacturer capacity and stability limits; account for slope, ground bearing, boom extension, load size and machine orientation.

Positioning

Position machines on stable ground with sufficient clearance from trucks, decks, overhead lines and other equipment.

Shutdown

When leaving the cab, apply brakes, secure/ground moving elements and place the transmission or controls in the manufacturer-specified park condition.

Supervisor / Employee Verification Checklist

Verification Item

- Operator authorized
- Exclusion zone maintained
- Capacity limits followed
- Ground conditions acceptable
- Safe shutdown used

Required Records

- Operator evaluations
- Inspection records
- Site observations
- Maintenance records

Key Federal References

29 CFR 1910.266(f)(2); 29 CFR 1910.266(h)(6)

SKIDDERS, TRACTORS & YARDING EQUIPMENT

Chapter Overview. Addresses movement of logs to the landing and the hazards created by skidding, chokers, winching and machine travel.

SAFETY IS OUR CORE VALUE

Purpose

Keep employees clear of moving logs, lines and equipment while logs are yarded to the landing.

Scope

Skidders, tractors, winches and related ground-based yarding equipment.

Clear Before Movement

No log should be moved until employees are in the clear. Operators and ground employees must use agreed signals and maintain visual/radio communication as appropriate.

Chokers and Logs

Hooking/unhooking should be performed from a protected position; logs that could roll or slide must be secured before employees enter the hazard area.

Machine Travel

Evaluate slope, traction, stumps, holes, soft ground and rollover exposure. Use seat belts and protective structures as required.

Winch and Line Hazards

Keep employees out of bights and recoil zones; inspect lines, chokers and attachment points and remove damaged components from service.

Supervisor / Employee Verification Checklist

Verification Item
Employees clear before movement
Signals understood
Chokers/lines inspected
Slope/travel route evaluated
Seat belts used

Required Records

- Equipment inspections
- Rigging inspection/replacement records
- Training records

Key Federal References

29 CFR 1910.266(h)(5); 29 CFR 1910.266(f)

CHAINSaws & PORTABLE POWERED TOOLS

Chapter Overview. Provides logging-specific chainsaw and portable-tool requirements relevant to limbing, bucking, clearing and landing support work.

SAFETY IS OUR CORE VALUE

Purpose

Prevent cuts, kickback, fire and struck-by injuries from portable powered tools.

Scope

Employees authorized to use chainsaws or portable powered tools in support of hauling, loading and landing operations.

Pre-Use Condition

Inspect controls, chain tension, bolts, handles and required safety features before use. Remove defective tools from service.

Fueling and Starting

Fuel away from ignition sources and start the saw away from the fueling area using a stable, approved starting method.

Operation

Maintain secure footing and control, keep both hands on the handles during cutting, avoid overhead cutting and engage the brake or stop the chain when carrying as required.

PPE

Chainsaw operators require task-specific PPE, including cut-resistant leg and foot protection as specified by the logging standard.

Supervisor / Employee Verification Checklist

Verification Item

- Saw inspected
- Required safety features functional
- Fueling controls followed
- Chainsaw PPE worn
- Operator trained

Required Records

- Tool inspection records
- Training/authorization
- PPE records

Key Federal References

29 CFR 1910.266(e); 29 CFR 1910.266(d)(1)

EQUIPMENT MAINTENANCE, ENERGY ISOLATION & FIELD REPAIR

Chapter Overview. Controls maintenance hazards from stored energy, raised components, unexpected movement and field repairs.

SAFETY IS OUR CORE VALUE

Purpose

Ensure equipment is stabilized, de-energized and repaired by qualified personnel before service.

Scope

Shop and field maintenance on logging machines, loaders, trucks and support equipment.

Safe Maintenance Position

Before maintenance, follow manufacturer procedures; lower or mechanically secure booms, blades, grapples, beds and other elevated components and prevent machine movement.

Energy Control

Use applicable OSHA lockout/tagout requirements for covered servicing and maintenance, together with manufacturer-specific isolation procedures for hydraulic, pneumatic, electrical, mechanical and gravity energy.

Field Repairs

Move equipment to a safe location when feasible, establish a work zone, chock/block as needed and control traffic and machine interaction.

Return to Service

Verify guards, brakes, alarms, access systems and protective devices have been restored before releasing equipment.

Supervisor / Employee Verification Checklist

Verification Item
Machine stabilized
Stored energy controlled
Raised components blocked
Work zone protected
Post-repair verification complete

Required Records

- LOTO procedures where applicable
- Repair orders
- Post-repair inspections
- Authorized employee training

Key Federal References

29 CFR 1910.147 as applicable; 29 CFR 1910.266(f)

SECTION III

Landings, Loading & Unloading

Chapters 12–17

Section Overview

Controls the high-consequence hazards created when logs are accumulated, stacked, loaded, secured, released and unloaded. It establishes exclusion zones, communication, vehicle positioning, load stability, tiedown practices and deck stability.

SAFETY • CONTROL • ACCOUNTABILITY

LANDING & LOG DECK SAFETY

Chapter Overview. Defines safe layout, stability, access and housekeeping for landings and log decks.

SAFETY IS OUR CORE VALUE

Purpose

Provide enough stable working space for machines, trucks and employees without uncontrolled log movement.

Scope

Active landings, log decks, staging areas and loading approaches.

Landing Layout

Provide adequate clearance for trucks and machines, separate pedestrian areas where practicable and control queues so vehicles do not create conflicts.

Deck Stability

Each log deck must be constructed and located so it is stable and provides employees enough room to safely move and work.

Ground Conditions

Inspect for soft shoulders, slope, holes, mud, ice, washouts and edge hazards that could affect truck or loader stability.

Housekeeping

Remove slash, debris, spilled fuel and trip hazards from access and work areas.

Supervisor / Employee Verification Checklist

Verification Item
Landing layout reviewed
Deck stable
Truck path adequate
Ground conditions acceptable
Housekeeping maintained

Required Records

- Landing inspection
- Corrective-action log
- Site plan

Key Federal References

29 CFR 1910.266(h)(8); 29 CFR 1910.266(d)(6)

LOADING-ZONE CONTROL & COMMUNICATION

Chapter Overview. Establishes exclusion zones, essential-personnel rules and communication during log loading.

SAFETY IS OUR CORE VALUE

Purpose

Keep people out of the path of moving machines and logs.

Scope

All active log loading areas.

Essential Personnel Only

Only the machine operator and other essential personnel should be in the loading area while logs are being handled.

Driver Position

Company policy should define whether the truck driver remains in or exits the cab. If logs are moved over an occupied cab, effective falling-log protection is required.

Communication

Use standardized hand, radio or other signals. Stop loading immediately when communication is lost or any person enters the hazard zone.

Clearances

Position the transport vehicle to provide safe working clearance between the truck and deck and adequate room for loader movement.

Supervisor / Employee Verification Checklist

Verification Item

- Exclusion zone defined
- Driver position rule understood
- Signals standardized
- Clearance adequate
- Loading stops on communication loss

Required Records

- Loading-zone observations
- Training records
- Site rules

Key Federal References

29 CFR 1910.266(h)(6)(i)–(iii)

LOG LOADING PROCEDURES

Chapter Overview. Sets the sequence for placing logs on transport vehicles in a stable, orderly and controlled manner.

SAFETY IS OUR CORE VALUE

Purpose

Prevent falling logs, shifting loads, truck instability and employee exposure.

Scope

Mechanical loading of logs onto trucks and trailers.

Truck Setup

Park on the most level, stable surface available, set brakes and position the truck for safe loader access. Chock wheels where conditions or company procedures require.

Orderly Placement

Each log must be placed in an orderly manner and the load positioned to prevent slippage or loss during handling and transport.

Load Profile

Keep logs within stake/bunk capacity and legal dimensional limits. Avoid unstable crowns, crosswise pieces or unsupported logs that can roll or slide.

Final Check

Before leaving the loading zone, inspect load alignment, stakes/bunks, tiedowns, lights, tires and clearance.

Supervisor / Employee Verification Checklist

Verification Item
Truck stable before loading
Logs placed orderly
No unstable pieces
Stake/bunk capacity respected
Final walk-around completed

Required Records

- Loading inspection
- Defect/corrective records
- Driver training

Key Federal References

29 CFR 1910.266(h)(6)(iv)–(v); 49 CFR 393.116 as applicable

LOAD SECUREMENT, STAKES, CHOCKS & TIEDOWNS

Chapter Overview. Integrates OSHA logging loading requirements with FMCSA's commodity-specific log securement rules.

SAFETY IS OUR CORE VALUE

Purpose

Keep logs contained on the vehicle during loading, transport and unloading.

Scope

Log trucks and trailers transporting logs.

Securement System

Use bunks, stakes, tiedowns and other components designed, rated and maintained for the load and vehicle configuration.

Tiedown Condition

Inspect tiedowns, tensioning devices, attachment points, stakes and bunks before use; remove damaged or inadequate components from service.

OSHA Transport Check

The transport vehicle operator must assure each tiedown is tight before transport and check/tighten tiedowns en route whenever there is reason to believe they loosened or the load shifted.

FMCSA Commodity Rule

When FMCSA cargo-securement rules apply, log loads must meet 49 CFR 393.116 and the general performance/securement requirements incorporated by Part 393. Configuration-specific requirements should be built into company load diagrams and driver training.

Supervisor / Employee Verification Checklist

Verification Item
Securement system matches load
Tiedowns serviceable
Tension verified before travel
En-route recheck triggers understood
FMCSA configuration requirements documented

Required Records

- Securement inspection records
- Equipment replacement records
- Driver training
- Load diagrams

Key Federal References

29 CFR 1910.266(h)(7); 49 CFR 393.100–393.136; 49 CFR 393.116

UNLOADING & TIEDOWN RELEASE

Chapter Overview. Controls the moment when securement is removed and logs can shift or roll.

SAFETY IS OUR CORE VALUE

Purpose

Prevent employees from being struck or crushed by released logs.

Scope

Truck unloading at mills, yards, landings and other delivery locations.

Unload Protection

Before releasing tiedowns, ensure unloading lines, stakes or equivalent protection are in place as required so logs cannot release uncontrolled.

Release Side

Tiedowns must be released from the side on which the unloading machine operates unless the regulatory exceptions for remote release or effective protection apply.

Trip Stakes/Chocks

Trip mechanisms must be activated from the side opposite the release of the load.

Exclusion Zone

Keep employees clear of the downhill, release and roll-out sides of the load. Stop if logs are visibly shifted or unstable until a controlled unloading method is established.

Supervisor / Employee Verification Checklist

Verification Item
Protection in place before release
Correct release side used
Trip mechanism safely positioned
Employees clear of roll-out zone
Shifted load procedure understood

Required Records

- Unloading procedure
- Training records
- Incident/near-miss reports

Key Federal References

29 CFR 1910.266(h)(6)(vi)–(viii)

LOG STORAGE, DECK STABILITY & HOUSEKEEPING

Chapter Overview. Addresses stable storage and safe movement around accumulated logs.

SAFETY IS OUR CORE VALUE

Purpose

Prevent rolling, collapse, trip and access hazards in storage and staging areas.

Scope

Log decks, mill yards under employer control, landings and temporary storage areas.

Stable Decks

Construct and locate decks to remain stable under expected loads and weather conditions.

Employee Access

Provide adequate space for safe movement and keep employees out of areas where logs could roll, slide or settle.

Stack Management

Do not climb unstable log piles. Use machines to reposition unstable logs and maintain stakes or containment where required.

Housekeeping

Control bark, slash, mud, ice and debris on walking and machine surfaces.

Supervisor / Employee Verification Checklist

Verification Item

- Deck stable
- No uncontrolled roll path
- Access clear
- Unstable logs handled mechanically
- Housekeeping acceptable

Required Records

- Deck inspections
- Corrective actions
- Site observations

Key Federal References

29 CFR 1910.266(h)(8)

SECTION IV

Log Truck & Roadway Safety

Chapters 18–23

Section Overview

Covers the transition from the landing to public-road transport, including driver qualification, vehicle roadworthiness, commodity-specific log securement, HOS applicability, route/weather controls and transport of logging machines.

SAFETY • CONTROL • ACCOUNTABILITY

DRIVER QUALIFICATION & FITNESS FOR DUTY

Chapter Overview. Defines company and federal qualification expectations for log-truck drivers.

SAFETY IS OUR CORE VALUE

Purpose

Ensure drivers are licensed, authorized, physically capable and fit to operate the assigned vehicle.

Scope

Employees and contractors operating log trucks or other company road vehicles.

Licensing and Qualification

Verify the correct license class, endorsements and driver qualification documentation where FMCSA rules apply.

Medical Qualification

Maintain medical certification when required for the driver's CMV operation and review restrictions before assignment.

Fitness for Duty

Drivers must not operate when fatigue, illness, medication, alcohol/drugs, heat stress or another condition makes driving unsafe.

Vehicle-Specific Authorization

Train and evaluate drivers on the actual truck/trailer configuration, securement system, terrain and unloading practices.

Supervisor / Employee Verification Checklist

Verification Item
License verified
Medical status current when required
DQ file complete where applicable
Vehicle-specific authorization documented
Fitness-for-duty expectations understood

Required Records

- Driver qualification file where applicable
- MVR reviews
- Medical certificate where applicable
- Training/evaluation records

Key Federal References

49 CFR Parts 382, 383 and 391 as applicable

VEHICLE INSPECTION & ROADWORTHINESS

Chapter Overview. Establishes daily inspection, defect correction and preventive-maintenance controls for log trucks and trailers.

SAFETY IS OUR CORE VALUE

Purpose

Prevent roadway and worksite incidents caused by unsafe vehicle condition.

Scope

Log trucks, trailers and road-going support vehicles.

Pre-Trip Condition

Drivers should verify brakes, steering, tires, wheels, lights, mirrors, wipers, coupling devices, stakes/bunks, securement hardware and other safety-critical components before operation.

Logging Standard

Logging vehicles must be maintained in serviceable condition and inspected at the beginning of each workshift; defects affecting safe operation require removal from service.

FMCSA Inspection/Maintenance

Where FMCSA rules apply, motor carriers must maintain vehicles in safe operating condition and comply with applicable inspection, repair and maintenance requirements.

Defect Closure

Document safety defects, assign repair responsibility and verify correction before return to service.

Supervisor / Employee Verification Checklist

Verification Item

- Pre-shift/pre-trip completed
- Brakes/tires/lights acceptable
- Stakes/bunks inspected
- Safety defects corrected
- Preventive maintenance current

Required Records

- Inspection reports
- Repair orders
- PM records
- Annual inspection documentation where applicable

Key Federal References

29 CFR 1910.266(g); 49 CFR Parts 392 and 396 as applicable

FMCSA LOG CARGO SECUREMENT

Chapter Overview. Provides a focused compliance chapter for commodity-specific federal log securement requirements on public-road CMVs.

SAFETY IS OUR CORE VALUE

Purpose

Translate 49 CFR 393.116 into truck-configuration-specific loading and securement practices.

Scope

CMVs transporting logs where FMCSA cargo-securement rules apply.

Applicability

FMCSA identifies logs as a commodity with specific securement requirements. Certain unitized logs, small numbers of processed logs and short-log/debris configurations may fall under different provisions described in the rule.

Configuration Procedures

Maintain written securement diagrams for shortwood, longwood, pole-length and other configurations actually used by the company. Specify bunks/stakes, minimum tiedown placement, tensioning and inspection.

Working Load Limits

Securement devices and systems must meet applicable performance and working-load-limit requirements. Do not use damaged webbing, chains, binders or attachment points.

Driver Verification

The driver must verify the load is contained, immobilized or secured so it cannot leak, spill, blow, fall or shift to an extent that adversely affects vehicle stability or maneuverability.

Supervisor / Employee Verification Checklist

Verification Item
Correct securement rule identified
Configuration diagram available
WLL adequate
No damaged devices
Driver verifies before movement

Required Records

- Securement procedures
- Device inspection records
- Driver training
- Cargo-securement audit records

Key Federal References

49 CFR 393.100–393.136; 49 CFR 393.116

HOURS OF SERVICE, FATIGUE & DISTRACTION

Chapter Overview. Addresses federal HOS applicability and company controls for fatigue and distraction.

SAFETY IS OUR CORE VALUE

Purpose

Keep drivers alert and legally available to drive.

Scope

Drivers of covered property-carrying CMVs and all company drivers under company fatigue/distraction rules.

HOS Applicability

When Part 395 applies, property-carrying drivers are generally subject to the 11-hour driving limit after 10 consecutive hours off duty, the 14-hour driving window, the 30-minute break requirement after 8 cumulative hours of driving without a qualifying interruption, and applicable 60/70-hour limits, subject to exceptions.

Records of Duty Status

Use ELDs, time records or other records of duty status as required for the specific operation and any valid exception.

Fatigue Management

Do not dispatch or continue driving when fatigue makes operation unsafe. Plan for logging-road delays, mill queues, weather and loading time without pressuring drivers to exceed safe or legal limits.

Distraction

Prohibit texting and other unlawful or unsafe device use while driving. Navigation, dispatch and securement issues should be handled from a safe stopped position.

Supervisor / Employee Verification Checklist

Verification Item
HOS applicability determined
RODS/ELD method correct
Fatigue reporting supported
No-distraction policy enforced
Dispatch plans realistic

Required Records

- HOS/RODS records where required
- ELD supporting records
- Fatigue reports
- Training records

Key Federal References

49 CFR Part 395 as applicable; 49 CFR 392.80–392.82 as applicable

ROADWAY, ROUTE, GRADE & WEATHER SAFETY

Chapter Overview. Addresses the distinctive route hazards of log hauling from forest roads to public highways.

SAFETY IS OUR CORE VALUE

Purpose

Control speed, traction, clearance, bridge, grade and weather risks before and during transport.

Scope

Log trucks traveling on private logging roads, access roads and public highways.

Route Planning

Identify weight/size restrictions, bridge limits, low clearances, steep grades, sharp curves, school/community areas and seasonal road limitations before dispatch.

Speed and Space

Drivers should adjust speed and following distance for load weight, center of gravity, road surface, grade, visibility and stopping distance.

Grades and Braking

Select safe gears before descending steep grades and use braking techniques appropriate to the vehicle and manufacturer guidance. Do not continue with overheated or deficient brakes.

Weather

Stop or modify operations for ice, flooding, wildfire/smoke, high winds, severe storms or visibility conditions that eliminate an adequate safety margin.

Supervisor / Employee Verification Checklist

Verification Item
Route reviewed
Bridge/weight limits known
Grade plan understood
Weather monitored
Stop criteria understood

Required Records

- Route hazard records
- Driver briefings
- Weather/closure communications

Key Federal References

49 CFR Part 392 as applicable; 29 CFR 1910.266(d)(5)

TRANSPORT OF LOGGING MACHINES & SUPPORT EQUIPMENT

Chapter Overview. Controls loading, securing and hauling skidders, loaders and other logging machines on lowboys or equipment trailers.

SAFETY IS OUR CORE VALUE

Purpose

Prevent roll-off, securement failure and struck-by incidents during equipment transport.

Scope

Transport of logging machines and support equipment between sites.

Loading/Unloading

Use stable, adequately rated ramps or loading surfaces; align the trailer and machine; keep nonessential employees clear; use a spotter only under a defined communication plan.

Machine Preparation

Lower and secure booms, grapples, blades and attachments; articulate or lock components as manufacturer instructions require; remove loose debris and tools.

Securement

When FMCSA rules apply, heavy vehicles, equipment and machinery must be secured under the applicable commodity-specific requirements, including adequate tiedowns and restraint against movement.

Height/Width/Weight

Verify legal dimensions, permits when required, axle weights and route restrictions before movement.

Supervisor / Employee Verification Checklist

Verification Item

- Trailer/ramp rated
- Machine attachments secured
- Tiedowns adequate
- Dimensions/weights verified
- Route/permit requirements checked

Required Records

- Equipment transport checklist
- Securement inspection
- Permit records
- Driver/operator training

Key Federal References

49 CFR 393.126 and related Part 393 provisions as applicable; 29 CFR 1910.266(f)(2)(xiii)

Program Assurance & Implementation

Chapters 24–27

Section Overview

Provides the documentation, investigation, auditing, environmental controls, corrective-action systems and implementation forms needed to keep the handbook active and verifiable.

SAFETY • CONTROL • ACCOUNTABILITY

INCIDENT REPORTING, INVESTIGATION & CORRECTIVE ACTION

Chapter Overview. Establishes prompt response and learning after injuries, near misses, equipment events, load shifts and vehicle crashes.

SAFETY IS OUR CORE VALUE

Purpose

Identify root and contributing causes and prevent recurrence.

Scope

All logging, loading, hauling, equipment and maintenance incidents.

Immediate Response

Protect life, stop hazardous movement, call emergency services when needed, control secondary hazards and preserve the scene when safe.

Reporting

Require prompt internal reporting of injuries, near misses, load shifts, dropped logs, equipment contact, rollovers, fires and roadway crashes.

Investigation

Document conditions, equipment, load configuration, training, procedures, supervision, communications and environmental factors. Focus on system causes, not blame alone.

Regulatory Reporting

Evaluate OSHA severe-event reporting, FMCSA crash/reporting obligations and state requirements based on the actual event and jurisdiction.

Supervisor / Employee Verification Checklist

Verification Item
Scene controlled
Internal report completed
Evidence preserved
Root causes evaluated
Corrective actions assigned/closed

Required Records

- Incident report
- Investigation file
- Photos/diagrams
- Corrective-action log
- Regulatory reports where required

Key Federal References

29 CFR Part 1904 as applicable; 49 CFR Parts 390/395/396 as applicable

INSPECTIONS, AUDITS, RECORDS & REGULATORY REVIEW

Chapter Overview. Creates the verification system that keeps the handbook active rather than merely written.

SAFETY IS OUR CORE VALUE

Purpose

Measure compliance, identify drift and maintain evidence of implementation.

Scope

All handbook programs and operating locations.

Inspection Program

Use documented pre-shift, landing, loading-zone, vehicle, securement and maintenance inspections with clear defect escalation.

Field Audits

Supervisors should observe loading, tiedown release, machine separation, PPE, seat belts and driving/securement practices and document significant findings.

Records

Retain required OSHA, training, equipment, motor-carrier and company records for the applicable periods and protect medical/confidential records appropriately.

Annual Review

Review the handbook at least annually and after serious incidents, new equipment, new states/locations, regulatory changes or material changes in operations.

Supervisor / Employee Verification Checklist

Verification Item

Inspection forms current

Audits performed

Records retained

Corrective actions verified

Annual review completed

Required Records

- Audit reports
- Inspection logs
- Regulatory matrix
- Revision history
- Corrective-action register

Key Federal References

29 CFR 1910.266(i)(10); Applicable 49 CFR recordkeeping provisions

ENVIRONMENTAL, FUEL & SPILL CONTROLS

Chapter Overview. Addresses fuel handling, spill prevention and environmental housekeeping associated with remote logging and fleet operations.

SAFETY IS OUR CORE VALUE

Purpose

Prevent fires, releases and environmental damage while maintaining safe work areas.

Scope

Fueling, lubrication, maintenance, mobile tanks and spill response.

Fueling

Control ignition sources, use approved containers and maintain safe separation and housekeeping during fueling.

Spill Prevention

Inspect hoses, tanks, caps and transfer equipment; keep spill materials appropriate to expected releases and train employees on safe initial response.

Waste

Manage used oil, filters, absorbents, batteries and contaminated materials under applicable environmental and waste requirements.

Escalation

Employees should not attempt cleanup beyond their training, PPE or available equipment. Significant releases require prompt management and regulatory evaluation.

Supervisor / Employee Verification Checklist

Verification Item
Fuel controls in place
Spill kits available
Leaks corrected
Waste managed properly
Reporting contacts current

Required Records

- Fuel inspections
- Spill reports
- Waste records
- Training

Key Federal References

29 CFR 1910.266(d)(9); 40 CFR Part 112 where applicable

EMPLOYEE ACKNOWLEDGMENTS & IMPLEMENTATION

APPENDICES

Chapter Overview. Provides the forms and sign-offs needed to convert the handbook into a controlled company program.

SAFETY IS OUR CORE VALUE

Purpose

Document employee receipt, training, inspections and program ownership.

Scope

All employees and managers covered by the handbook.

Acknowledgment

Employees should acknowledge receipt, understand that site-specific rules and manufacturer instructions also apply, and agree to report hazards and stop unsafe work.

Implementation

Management should assign an owner to each chapter, customize forms to actual equipment and routes, and integrate the handbook with existing fleet, HR, environmental and emergency programs.

Revision Control

Record revision number, effective date, changes, approver and distribution method whenever the handbook is updated.

Supervisor / Employee Verification Checklist

Verification Item

- Acknowledgments signed
- Program owners assigned
- Forms customized
- Revision log current
- Superseded copies controlled

Required Records

- Employee acknowledgments
- Implementation checklist
- Revision log
- Distribution record

Key Federal References

29 CFR 1910.266(i)(10); Company document-control requirements

Implementation Appendices

Appendix A | Daily Logging Machine / Vehicle Inspection

Date / Shift: _____

Equipment ID: _____

Operator: _____

- ☐ Brakes / parking brake
- ☐ Steering / controls
- ☐ Tires / tracks / wheels
- ☐ ROPS/FOPS/cab
- ☐ Seat belt
- ☐ Steps / handholds / egress
- ☐ Guards / covers
- ☐ Hydraulic lines / cylinders
- ☐ Grapple / boom / attachment
- ☐ Alarms / horn / lights
- ☐ Fire extinguisher
- ☐ Fuel / oil leaks

Defects / action: _____

Appendix B | Landing & Loading-Zone Inspection

Location: _____

Date: _____

Inspector: _____

- ☐ Stable ground and truck approach
- ☐ Log deck stable
- ☐ Adequate machine/truck clearance
- ☐ Exclusion zone established
- ☐ Communication method confirmed
- ☐ Overhead-line exposure addressed
- ☐ Emergency access/location known
- ☐ Housekeeping acceptable

Corrective action: _____

Appendix C | Log Load / Securement Verification

Truck / Trailer: _____

Driver: _____

Load Type: _____

- ☐ Logs orderly and stable



NATIONAL INDEPENDENT BUSINESS ALLIANCE

LOG HAULING, LOADING & LOGGING EQUIPMENT SAFETY HANDBOOK

- ☐ Stakes/bunks serviceable
- ☐ Tiedowns correct for configuration
- ☐ Tiedowns and binders serviceable
- ☐ Tension verified
- ☐ Legal height/width/weight checked
- ☐ Lights/reflectors visible
- ☐ En-route recheck triggers understood

Notes: _____

Appendix D | Incident / Near-Miss Investigation

Date / Time: _____

Location: _____

Persons involved: _____

Equipment / Vehicle: _____

Event description: _____

Immediate controls: _____

Contributing factors: ☐ Procedure ☐ Training ☐ Equipment ☐ Load ☐ Ground ☐ Weather ☐ Communication ☐ Fatigue ☐ Other

Corrective actions / owners / due dates: _____

Appendix E | Training & Competency Record

Employee: _____

Job / Equipment: _____

Trainer: _____

Date: _____

- ☐ Task hazards
- ☐ Manufacturer instructions
- ☐ Pre-shift inspection
- ☐ Safe operating limits
- ☐ Exclusion zones / signals
- ☐ Emergency response
- ☐ Practical demonstration satisfactory

Employee signature: _____ Trainer signature: _____

Appendix F | Employee Acknowledgment

I acknowledge receipt of the NIBA Log Hauling, Loading & Logging Equipment Safety Handbook. I understand that this handbook must be used with company procedures, site-specific rules, manufacturer instructions and applicable federal/state requirements. I agree to report hazards, defects, incidents and unsafe conditions and to stop work when a serious uncontrolled hazard exists.

Employee: _____

Signature: _____

Date: _____

Federal Regulatory & Technical Source Register

The following official sources were used to develop this handbook. Employers should verify current versions and state-specific requirements before implementation.

Official Source	URL
OSHA 29 CFR 1910.266 - Logging Operations	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.266
OSHA Logging eTool	https://www.osha.gov/etools/logging
OSHA Log Loading and Transporting eTool	https://www.osha.gov/etools/logging/manual-operations/log-loading-transport
OSHA Logging - Machines and Vehicles	https://www.osha.gov/etools/logging/mechanical-operations/machines
OSHA Logging - First Aid	https://www.osha.gov/etools/logging/manual-operations/first-aid
OSHA Appendix B - First Aid and CPR Training	https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.266AppB
OSHA Logging Standards and Interpretations	https://www.osha.gov/logging/standards
FMCSA Cargo Securement Rules	https://www.fmcsa.dot.gov/regulations/cargo-securement/cargo-securement-rules
FMCSA Hours of Service	https://www.fmcsa.dot.gov/regulations/hours-of-service
FMCSA Summary of Hours of Service Regulations	https://www.fmcsa.dot.gov/regulations/hours-service/summary-hours-service-regulations
eCFR Title 49 - Transportation	https://www.ecfr.gov/current/title-49
eCFR Title 29 - Labor	https://www.ecfr.gov/current/title-29

Revision History

Revision	Date	Description	Approved By
1.0	September 2026	Initial logging hauling/loading/equipment edition	_____