

# Safety-Gram

## Title 45, Chapter 11

September 2025

Volume 26, Number 9

# Heavy Equipment Safety

*Operating heavy machinery is essential in mining. However, it comes with inherent risks that require strict adherence to safety protocols. Here are some Safety Protocols to follow:*

### 1. Conduct Pre-Operational Inspections

Before starting up any heavy equipment, it's crucial to conduct a thorough **pre-operational inspection**. This ensures the machinery is in proper working condition and prevents potential accidents due to faulty equipment.

- **Check Fluid Levels:** Hydraulic oil, engine oil, transmission fluid, and coolant should all be at appropriate levels.
- **Inspect Tires/Tracks:** Check for wear, tear, or damage.
- **Examine Hydraulic Systems:** Look for leaks or cracks in hydraulic hoses.
- **Test Lights and Alarms:** Ensure all safety alarms, horns, and lights are functioning.

### 2. Proper Training and Certification

Heavy machinery should only be operated by **trained and certified individuals**. Training should include:

- **Understanding** equipment controls and functions.
- **Reading and comprehending** operator manuals.
- **Recognizing and avoiding** hazards.

### 3. Follow Safe Operating Procedures

Implementing and adhering to **safe operating procedures** is key to preventing accidents.

- **Seat Belts:** Always wear them to prevent injuries during unexpected movements.
- **Speed Control:** Operate machinery at appropriate speeds to maintain control.
- **Load Limits:** Do not exceed the recommended load limits.
- **Stabilization:** Ensure machinery is stabilized before operation (e.g., lowering outriggers or using wheel chocks).

### 4. Establish Clear Communication Protocols

**Clear communication** is crucial, especially on busy mine sites.

- **Hand Signals:** Use standardized hand signals for directions.
- **Two-Way Radios:** Ensure radios are functioning properly for effective communication.
- **Spotters:** Use a spotter for blind spots and tight spaces.

### 5. Maintain a Safe Operating Environment

The **operating environment** plays a significant role in machinery safety.

- **Clear Obstacles:** Remove obstacles from operating paths.
- **Signage:** Use warning signs to alert others to potential hazards.
- **Weather Conditions:** Avoid operating in extreme weather conditions, especially high winds or storms.

### 6. Implement Lockout/Tagout Procedures

When **servicing or maintaining** machinery:

- **Lockout:** Ensure the equipment is completely shut down.
- **Tagout:** Attach warning tags to inform others that the equipment is under maintenance.

### 7. Emergency Preparedness

Despite all precautions, **emergencies** can still occur. Be prepared with:

- **Emergency Stops:** Know the location of emergency stop switches.
- **First Aid Kits:** Have first aid kits readily available.
- **Emergency Contacts:** Maintain a list of emergency contacts and procedures.

## HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST LOG BOOK

Date:	Time:	Shift:
Machine Type:	Machine No:	Serial No:
Location:	Operator Name:	

Description of Condition	OK		Description of Condition	OK	
	NO	NO		NO	NO
ATTACHMENTS			Bucket		
			Blade		
			Wear		
BRAKES			Parking Brake		
			Service Brake		
			Seat/BOPS/HOPS		
			Heater		
			Defroster		
CAB			Fire Extinguisher		
			Mirrors		
			Windows		
			Washers		
			Visibility		
			Lubrication		
BOOM			Wear Pads		
			Steering		
			Gauges		
CONTROLS			Lights		
			Indicators		
			Cylinders		
HYDRAULICS			Hoses		
			Rams		
			Present		

Hydraulic Fluid Level		
Engine Oil Level		
Transmission Fluid Level		
Brace Oil		
Radiator Coolant		
Battery Water/Overseas		
Wiper Water		
Fuel		
Pressure		
TIRES/WHEELS		
Shuts		
Wear		
Chains		
Hooks		
Pins		
WEAR OR DAMAGE		
Reversing Alarm		
Horn		
Lights		
Reverse Ignite & Alarm		
SIGNALS & ALARMS		
OTHER		

Operator's Name & Signature

## ★ CONCLUSION ★

Safety is a collective responsibility that requires proactive measures from everyone on the mine site. By following these guidelines, you can ensure a safer working environment and reduce the risk of accidents.

**Stay safe and remember: Safety is not just a requirement, it's a culture we must all foster.**