



ZERO FATALITY STANDARD – ZFS No.3 WORK WITH HEAVY EQUIPMENT

2nd Version – May 2022

PURPOSE OF THE STANDARD

The purpose of this standard is to establish the requirements for working with heavy equipment, and to define the minimum contents that must be included in Colbun's procedures and its Collaborating Companies.

This standard applies to all tasks involving the operation of heavy motorized vehicles for load transportation, earthmoving, excavations, and related activities.

Heavy equipment includes vehicles such as trucks with a gross weight of over 3,500 kg, drills, shovels, tractors, motor graders, mini loaders, front loaders, compactors, water tankers, excavators, mini excavators, and others.

GUIDELINES

Before beginning any activity, a Job Hazard Analysis (JHA) must be conducted, considering the following elements, among others:

1. PERSONNEL REQUIREMENTS

Personnel operating or driving heavy equipment must meet the following criteria:

- a. Operator competencies must match the specific activity. These competencies must be documented and endorsed by the individual responsible for the equipment or the operator.
- b. Possess a valid municipal license appropriate for the class of heavy equipment being operated, including any applicable restrictions.

2. EQUIPMENT AND FACILITIES REQUIREMENTS

2.1. WORK AREA REQUIREMENTS

The work area for heavy equipment operations must consider the following:

- a. Evaluate the specific characteristics of the work area, including environmental and meteorological conditions, proximity to energized lines, and the presence of gas, fuel, potable water, or compressed air pipelines, among other factors that could affect the safe execution of heavy equipment operations.
- b. Clearly define and designate movement and parking areas for heavy equipment at the work site.
- c. As part of the activity planning process, the access routes and parking areas for heavy equipment must be delimited, marked, and/or access-restricted.
- d. If the work involves operations on vehicular or pedestrian access roads, appropriate signage must be provided.
- e. The use of cell phones or other devices that could distract workers directly involved in the activity is prohibited.
- f. If the nature of the work requires it, at least the operators and site managers must be equipped with radio communication.

2.2. EQUIPMENT REQUIREMENT

Generale Requirements

- a. The service provider or person responsible for the equipment must provide a written declaration confirming that the equipment is in operational condition as per its maintenance guidelines and that it has the necessary legal permits.
- b. The operator must perform a visual inspection of the equipment's main components at the start of each shift, following the defined checklist and leaving a recorded log.
- c. Work involving heavy equipment must have, in addition to the operator, at least one ground support person to assist with maneuvering and activity coordination, as required.
- d. For underground work, only diesel or electric-powered equipment may be used.

Specific Equipment Requirements

Heavy equipment must be equipped with the following:

- a. An original manufacturer's rollover and fall protection structure, when applicable.
- b. Operational seat belts on all seats.
- c. An audible reverse alarm.
- d. Safety labels in Spanish on all moving parts that present a risk of entrapment.

3. RECORDS

[Use Checklist No. 3 to verify compliance Zero Fatalities Standards-Colbun S.A.](#)

EXCEPTIONS

Previous to the start of work, Colbun's Facility Manager (Project, Power Plant) may authorize exceptions to this Standard in writing. Should there be a discrepancy where there is more than one Facility Manager, it must be escalated to a higher hierarchical level for definition.