

No. 36/2019/TT-BLDTBXH

Hanoi, December 30, 2019

CIRCULAR
**PROMULGATING THE LIST OF MACHINERY, EQUIPMENT, MATERIALS AND
SUBSTANCES SUBJECT TO STRICT OCCUPATIONAL SAFETY AND HEALTH
REQUIREMENTS**

Pursuant to the Law on Occupational Safety and Health No. 84/2015/QH13 dated June 25, 2015;

Pursuant to the Government's Decree No. 44/2016/ND-CP dated May 15, 2016 elaborating some Articles of the Law on Occupational Safety and Health regarding technical inspection of occupational safety, training in occupational safety and health and occupational environmental monitoring;

Pursuant to the Government's Decree No. 14/2017/ND-CP dated February 17, 2017 defining the functions, tasks, powers and organizational structure of the Ministry of Labor, War Invalids and Social Affairs;

At the request of the Director of the Department of Work Safety;

The Minister of Labor, War Invalids and Social Affairs hereby promulgates a Circular on the List of machinery, equipment, materials and substances subject to strict occupational safety and health requirements.

Article 1. List of machinery, equipment, materials and substances subject to strict occupational safety and health requirements

The List of machinery, equipment, materials and substances subject to strict occupational safety and health requirements (hereinafter referred to as "the List") is promulgated together with this Circular.

Article 2. Implementation

1. According to socio - economic development and State management requirements, if the Ministries that have the power to manage machinery, equipment and materials subject to occupational safety and health requirements as stipulated in Article 33 of the Law on Occupational Safety and Health wish to revise the List, they shall submit written requests to the Ministry of Labor, War Invalids and Social Affairs. A written request shall contain at least:

- a) Name of the machinery, equipment or material deemed necessary to be added to the List, including its scientific name and trade name (if any);
- b) The necessity, feasibility and impact of the revision to the List (enclosed with draft inspection procedures, if any).

2. The Department of Work Safety affiliated to the Ministry of Labor, War Invalids and Social Affairs shall submit a consolidated report on Ministries' proposed revisions to the List as prescribed by law.

3. Departments of Labor, War Invalids and Social Affairs of provinces and centrally-affiliated cities shall cooperate with relevant authorities in disseminating and providing guidance on implementation of this Circular for enterprises, organizations, cooperatives, households and individuals using machinery, equipment and materials subject to occupational safety and health requirements within their provinces; submit annual consolidated reports on their implementation of this Circular and reports on occupational safety and health to the Ministry of Labor, War Invalids and Social Affairs.

Article 3. Effect

1. This Circular comes into force from March 01, 2020.
2. The Circular No. 53/2016/TT-BLDTBXH dated December 28, 2016 of the Ministry of Labor, War Invalids and Social Affairs is null and void from the effective date of this Circular.
3. Difficulties that arise during the implementation of this Circular should be reported to the Ministry of Labor, War Invalids and Social Affairs for consideration and resolution./.

**PP. THE MINISTER
THE DEPUTY MINISTER**

Le Tan Dung

**LIST
OF MACHINERY, EQUIPMENT, MATERIALS AND SUBSTANCES SUBJECT TO
STRICT OCCUPATIONAL SAFETY AND HEALTH REQUIREMENTS**
*(Enclosed with the Circular No. 36/2019/TT-BLDTBXH dated December 30, 2019 of the
Ministry of Labor, War Invalids and Social Affairs)*

No.	MACHINERY, EQUIPMENT, MATERIALS AND SUBSTANCES SUBJECT TO STRICT OCCUPATIONAL SAFETY AND HEALTH REQUIREMENTS
Section 1	Machinery, equipment and materials subject to strict occupational safety and health requirements
1	Boilers, of all types, (including superheaters and heating settings) with intended working pressure of vapour above 0.7 bar; water heaters with a boiling temperature exceeding 115°C.
2	Thermal oil heaters.
3	Systems of level I and II pipelines for vapour and hot water with an outer diameter of 51mm or more, pipelines of level III and IV with an outer diameter of 76mm or more classified by TCVN 6158:1996 and TCVN 6159:1996.

4	Pressure vessels with an intended working pressure of above 0.7 bar (regardless of hydrostatic pressure) classified by TCVN 8366:2010 and pressure vessels with an intended working pressure of above 210 bar.
5	Tanks (cisterns) and barrels used for storage and transport of liquefied gas, liquefied petroleum gas, compressed natural gas or liquids with a working pressure of above 0.7 bar or storage and transport of liquids or solids in powder form having no pressure but having an pressure of above 0.7 bar after being opened as classified by TCVN 8366:2010.
6	Bottles used for storage and transport of compressed gas, liquefied gas, natural liquefied gas, liquefied petroleum gas and dissolved gas with a working pressure of above 0.7 bar.
7	Compressed gas, liquefied gas, liquefied petroleum gas and dissolved gas supply, preparation and fueling systems.
8	Fixed gas pipeline systems, offshore gas pipeline systems; medical gas pipeline systems; compressed gas, liquefied gas and dissolved gas pipeline systems.
9	Refrigerating systems classified by TCVN 6739:2015, including those using group A3, B2L, B2 and B3 refrigerants; those using group A2 refrigerants with a refrigerant charge of at least 1.5kg; those using group A1, A2L and B1 refrigerants with a refrigerant charge of at least 05kg.
10	Cranes.
11	Bridge cranes.
12	Gantry crane, semi-gantry cranes.
13	Cargo cableways; passenger cableways; cableways of construction machines, inclined cableways and vertical cableways.
14	Electric powered chains; hand-operated chains with the nominal load capacity of 1,000 kg or more.
15	Electric trolley running on rails.
16	Electric winches for lifting or pulling loads on inclined direction; lifting tables; elevating work platforms; elevating work platforms for persons; winches for lifting persons.
17	Hand winches with the nominal load capacity of 1,000 kg or more.
18	Engine-powered cargo lift trucks with the nominal load capacity of 1,000 kg or more.
19	Human lift trucks: self-propelled lift trucks, lift trucks using hydraulic transmission or manual transmission for lifting people upwards exceeding 2m.

20	Builder hoists for material; builder hoists for material; builder hoists for persons; construction hoists.
21	Elevators of all types.
22	Escalators; passenger conveyors
23	Mobile stages.
24	Gaming devices: gliders, giant wheels and chutes with the lifting height of 2m or more from the fixed platform at the speed of 3m/s, except for those for sporting purposes.
25	Passenger telpher systems.
26	Winches and cableways with the nominal load capacity of 1,000 kg or more, used in mining.
27	Single hydraulic props, mobile frames and self-propelled supporting frames used in pit mining.
28	Internal combustion engine (with a calcite volume of more than 0.6 m ³ or a bore of more than 200mm).
29	Explosion-proof transformers.
30	Explosion-proof electric engines.
31	Explosion-proof distributor and breakers (magnetic starters, soft starters, automatic circuit breakers, inverters and earth leakage relays).
32	Explosion-proof remote control (pushbuttons, control panels).
33	Explosion-proof generators.
34	Explosion-proof power cables.
35	Explosion-proof lights.
36	Electric blasting machines.
37	Sliding formwork.
38	Drills, pile pressing machines and pile drivers.
39	Independent concrete pumping system
40	Steel scaffolding; supporting piles and pillars.
41	Suspended scaffolds used in construction.
42	Radio stations with the maximum broadcasting capacity of 150W or more.
43	Television stations with the maximum broadcasting capacity of 150W or more.

44	Floating platforms (bouys, ferries, canoes, etc.)
45	Oversize girder trailers; bridge erection machines
Section II	Machinery, equipment and materials subject to strict occupational safety and health requirements in the army sector
1	Explosives.
2	Explosive devices (detonators, detonating cords, lead-in wires, etc.).
3	Cables and fiber optic cables used in cranes/hoisting equipment 3Φ-24.40; 3Φ-24.50; БФМИ 468929.058.
4	Fiber optic cables used in cranes/hoisting equipment 3Φ-10.36-04.
5	Load tester 8E088.
6	Equipment MC-35004/Equipment set MC-35030.
7	Missile vehicles K350-110
8	Dry and cooling plant YXHC f55-70MЭ.
9	Brackets K350-60.
10	Crane beam K350-14-01.
11	Nitrogen bottles and nitrogen pipeline networks.
12	Station and storage facilities for storing, extracting and preparing liquid nitrogen gas and liquefied nitrogen with the purity of up to 98%.
13	Nitrogen cylinder 9П-117М.
14	Missile container cranes.
15	Missile crane P-15УПН9513-0.
16	Missile container cranes, missile launcher П9510-10А; warhead П9590-0 warhead in container C1.42-00.
17	Compressor ДК-9М and compressor ЭК-9.
18	Devices used for phlegmatizing explosives and propellants (Linter phlegmatization device; hexogen phlegmatization device; nitrocellulose (NC) phlegmatization device.
19	Reactors for production of propellants and explosives (devices for production of nitroglycerine (NG); nitrocellulose (NC); dinitrotoluene (DNT); tetracene acid; lead styphnic acid).
20	Pressure vessels for storage of materials used for producing explosive materials; pressure tanks used for transport of Na ₂ SO ₄ ; pressure tanks used for transport of

	Na ₂ SO ₃ .
21	Explosives compressors as part of propellant and explosives production lines: mechanical equipment (static compressors and 10-position compressors; hydraulic equipment (hydraulic compressors, primer and black powder compressors).
22	Explosives and propellant mixers as part of the propellant and explosives production line: Drum mixers (for mixing substances used for detonating cords, black powder, ammonite); shakers (sorters for selecting TEN and explosives precursors; black powder granulation machines), paddle mixers (powder mixture mixers, wet gunpowder mixers).
23	Ammunition and primer assembly machine: Vibration tester; impact testers; bullet dispensers; devices used for separating B40 bullet tailgates.
24	Scrap shredders (in ammunition).
25	Ammunition pneumatic grippers.
26	Pressure control booths, high pressure gas filters; pressure chambers used for training and provision of healthcare for naval sappers.
27	Compressed air stations YKC; VZ20/350; AKZC 75M oxygen station; UGZCIA nitrogen station.
28	Cranes used for lifting torpedoes, missiles and boats on ships and islands.
29	Connecting devices between missiles and lifting equipment.
30	Hoists for lifting and lowering PMP ferry bridge.
31	Overhead lifting equipment used for lifting and lowering bomb and ammunition (electric powered chains; hand-operated chains with the nominal load capacity of 500 kg or more).
32	Electric winches and hand winches used in propellant and explosives manufacturing facilities.
33	Bomb and ammunition lift trucks.
34	Derricks for used lifting and lowering pilot's seat.
35	Electromagnetic radiation-generating equipment (radar stations, radio communication stations and electronic warfare stations)
36	Automotive lifting equipment
37	Trucks for lifting, lowering and transporting ammunition of 4050 anti-aircraft missile
38	Compressed gas trailers up to 400 at 5JI94, MC-10

39	Brackets for testing explosive particles IIII3
40	Crane trucks 8T-210, KC-2573
41	UGZC-KP oxygen station
42	UGZC-MA nitrogen station
43	Laser generating equipment with a power of ≥ 10 mW (10 mJ)
44	Bomb and ammunition cutters.
45	Mortar shell removal equipment
III	Machinery, equipment, materials and substances subject to strict occupational safety and health requirements in the public security sector
1	Tear gas
2	Stun batons
3	Guns firing rubber bullets
4	Small grenades, Smoke bomb
5	Equipment used for handling post bombs
6	Explosive detectors
7	X-ray imagers
8	Mobile phone jammers
9	Guns used for destroying explosives
10	Fire extinguishing media - Extinguishing powder
11	Fire extinguishing media - Foam concentrates
12	Fire fighting and prevention systems - Fire sprinkler systems
13	Fire fighting and prevention equipment for buildings and structures
14	Gaseous fire-extinguishing systems
15	Portable fire extinguishers