СЕКЦИЯ «ЛИНГВИСТИЧЕСКОЕ ВЗАИМОДЕЙСТВИЕ В МЕЖДИСЦИПЛИНАРНЫХ ИССЛЕДОВАНИЯХ»

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HAZARDS RELATED TO MAINTENANCE IN AGRICULTURE

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Abstract. Risks and hazards related to maintenance in agriculture are considered in the article. Different types of hazards connected with the maintenance farm machinery are described.

Keywords: maintenance, risks, hazards, accidents, prevention.

Maintenance in agriculture influences almost all aspects of farm work, be it in the state of buildings and infrastructure, or the operation of machines and equipment.

Maintenance activities in agriculture can range from simple tasks, e.g. changing a light bulb, to more complicated ones such as maintenance and repair of machines, equipment and vehicles, maintenance of farmyards and buildings, silos, bins, and tanks, maintenance of electrical installations, as well as maintenance of drainage and irrigation systems and roads.

Risks and hazards related to maintenance tasks in agriculture are determined by the nature of these tasks.

Because of the wide variety of tasks, there are many different hazards involved.

Mechanical hazards are related to the maintenance of machinery, such as crushing, entanglement and high-pressure fluid injection. Hazards often occur at the point of operation, or the point where work is performed on the material. This could be cutting, shaping, boring, or forming of stock. Regardless the type of work, the point of operation of the work must be safeguarded. Moreover, all parts of the machine that move, e.g. flywheels, pulleys, belts, couplings, chains, cranks, gears, etc., pose threat of injury. The feed mechanisms and auxiliary parts of the machine should also be considered.

Common electrical related hazards are caused by faulty wiring, poor training, incorrectly replaced fuses, mixing water and electricity, use of overloaded or damaged plugs, sockets or cables, misuse of equipment or using equipment which is known to be faulty.

Other potential sources can be work in or on excavations, working in wet, harsh or confined conditions, working on or near overhead lines, for example tipping loads, working on or near equipment that's thought to be dead but has a live current. Electricity can also ignite flammable or explosive atmospheres, for example in spray paint booths or around refueling areas.

Thermal hazards are related to the use of welding or heating equipment during maintenance or maintenance of equipment with hot surfaces or operating fluids. Farmers can receive burns, scalds and other injuries through contact with objects or materials with an extremely high or low temperature, from flames or explosions and also from radiation of heat sources.

Chemical hazards are associated with the use and formation of dangerous substances during maintenance activities (repair, cleaning, lubrication, greasing, welding) or maintenance of equipment containing dangerous substances, e.g. machines and implements for plant protection and pest control.

Fire or explosion hazard will happen during maintenance of facilities or equipment containing dangerous and explosive substances such as tanks, bins and silos, or fuel tanks.

Biological hazards during maintenance of installations contaminated by biological agents, slurry tanks, ditches and sewage infrastructure.

Ergonomic hazards are physical conditions that may pose risk of injury to the musculoskeletal system, such as the muscles or ligaments of the lower back, tendons or nerves of the hands/wrists, or bones surrounding the knees. Ergonomic hazards include things such as awkward or extreme postures, whole-body or hand/arm vibration, poorly designed tools, equipment, or workstations, repetitive motion, and poor lighting.

Noise hazards occur when working in noisy premises or near a source of noise. They are caused by the use of noisy electrical tools such as circular saws or compressors. Sudden loud noise or constant exposure to a lot of noise may be hearing loss, loss of balance, loss of awareness of events in the surrounding environment. Accidents can also ensure due to interference in voice communication and audible warning signals.

But there are other factors that contribute to the high number and the severity of the accidents. Farmers often carry out a lot of maintenance work by themselves. This increases the risk of accidents because, on the one hand, the farmer may not have competences in specific maintenance tasks and on the other, machines and vehicles in agriculture are becoming more and more sophisticated, thus requiring qualification in maintenance and repair.

Farming often involves people working on their own. When a blockage occurs or a vehicle breaks down, the repair may be acquired by a lone worker. Not only does working alone increase the risk of an accident but it also means that in the case of an accident its severity can be amplified as the injured worker may not only be alone but also in a remote location.

One of the best ways to prevent and control occupational risks related to maintenance is to address them early in the design process of buildings and

structures, work environments, materials, and plant (machinery and equipment). Maintainability of the agricultural machinery and vehicles affects maintenance safety and helps minimize the risks of MSDs and it should be considered at the design stage. Good maintainability means among others that all points for routine maintenance are easy to access, such as lubrication points, motor, and battery, servicing and maintenance intervals are longer, etc. Poor maintainability might reduce maintenance safety, it prolongs the tasks, and makes work more complicated, all of which can increase the risk of accidents. Good design can prevent accidents if it is made difficult or impossible to perform a maintenance task incorrectly or in an unsafe way.

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FIVE TOP TIPS FOR FARM MACHINERY MAINTENANCE

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Abstract. A five tips to ensure that farm machinery is always maintained properly are presented in the article. It is shown that preventive farm machinery maintenance can reduce the likelihood of breakdown of equipment and the risks that technical specialists face during on-site repairs.

Keywords: farm machinery, wear, breakdown, scheduled maintenance, preventive measures.

Preventive and regularly scheduled maintenance is vital to the efficiency and life of farm machinery. This type of machinery makes it possible for traditional industries to operate on a large scale. Agriculture are among the global industries that could not exist in today's world at the scale they do without the use of different farm machinery to support their operations.

Preventive farm machinery maintenance preserves the value of the equipment. Keeping machines in good working order extends equipment life and keeps opera-