



نظام الشارقة للسلامة والصحة المهنية
Occupational Safety & Health Sharjah

حكومة الشارقة
هيئة الوقاية والسلامة
Government of Sharjah
Prevention And Safety Authority



Guideline

Safety on Farms

OSHJ-GL-28



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1 Introduction

Farming is one of the most dangerous industries and has some of the highest rates of work-related injuries and fatalities. Employees work with potentially dangerous machinery, vehicles, materials, equipment and livestock, often in difficult environments. Farming can also be very physically demanding, the repetitive nature of the work can cause a range of health problems, including severe back pain.

2 Purpose and Scope

This Guideline document has been developed to provide information to entities to assist them in complying with the requirements of the Occupational Safety and Health System in Sharjah.

To achieve compliance in the Emirate of Sharjah, all entities are required to demonstrate a standard of compliance which is equal to or higher than the minimum acceptable requirements outlined in this Guideline document.

This Guideline document excludes other activities on farms such as construction, forestry, fishing, manufacturing and retail.

3 Definitions and Abbreviations

Entities:	Government Entities: Government departments, authorities or establishments and the like in the Emirate. Private Entities: Establishments, companies, enterprises and economic activities operating in the Emirate in general.
Risk:	Is the combination of likelihood of the hazard causing the loss and the severity of that loss (consequences)
Risk Assessment:	The systematic identification of workplace hazards and evaluation of the risks associated. This process takes existing control measures into account and identifies and recommends further control measures where required.
Hazard:	Anything that has the potential to cause harm or loss (injury, disease, ill-health, property damage etc).
Farming:	The activity or business of growing crops and raising animals to produce milk or meat.
Animal Handling:	The activity of how employees work with, respond to and interact with animals within their surroundings.
Manufacturer's Manual:	The instructions, procedures and recommendations provided by the manufacturer to ensure the safe operation, maintenance and repair of the equipment.

4 Roles and Responsibilities

4.1 Entity Responsibilities

- Provide a safe place of work;
- Undertake risk assessments, identify hazards and introduce control measures;
- Provide suitable clothing and personal protective equipment (PPE);



- Ensure that plant and equipment are in safe working order and regularly maintained;
- Ensure that the transport, storage and handling of hazardous substances is safely managed;
- Ensure that when working with animals, employees are supervised, where required;
- Provide information, instruction, supervision and training to managers, supervisors and employees;
- Have an emergency plan;
- Have a system for employees to report injuries and illness;
- Enforce the requirements for a midday break during summer months for employees working outside, which is supported and enforced by The Ministry of Human Resources and Emiratisation (MOHRE).

4.2 Employee Responsibilities

- Not endanger themselves or others;
- Follow precautionary control measures to ensure work activities are performed safely and without risk to health;
- Cooperate with the entity and receive safety information, instruction, supervision and training;
- Report any activity or defect which they know are likely to introduce risks to the safety and health of themselves or that of any other person.

5 Guidelines

5.1 Safety on Farms Risk Assessment

The entity should identify hazards related to farming through the use of risk assessment and introduce effective control measures to reduce the exposure of hazards to employees, contractors, visitors and others. The risk assessment shall take into consideration the following factors, including but not limited to:

- The number of employees;
- The type of work activities, work demands and shift patterns;
- The type of vehicles, machinery and equipment used;
- The type of maintenance activities;
- The type of hazardous substances and materials used;
- The type of livestock;
- Clothing or personal protective equipment (PPE) provided;
- Lone workers;
- Ability of employees to conduct work safely;



- Ability of employees to access emergency services.

Further information on risk assessments can be found in OSHJ-CoP-01: Risk Management and Control.

5.2 Farm Vehicles and Machinery

Modern farm vehicles and machinery have reduced the amount of manpower and effort required to operate farms and therefore improved efficiency and ultimately productivity. However, this has increased the risks to employees who typically are lone working when using farm vehicles and machinery during farming activities, including farm vehicles including tractors, telehandlers, diggers, loaders, all-terrain vehicles, harvesters. Farm machinery can be any form of machinery that is attached to or powered by a farm vehicle.

The main hazards arising from using farm vehicles and machinery, include but are not limited to;

- Driver error from speeding or loss of control;
- Falling from vehicles;
- Overturning vehicles;
- Crushed under overturned vehicles;
- Reversing vehicles;
- Being run over by a moving vehicle;
- Being crushed between the vehicle and hydraulically mounted machinery.

The entity should ensure farm vehicles and machinery are in safe working condition before use, if a vehicle, machinery or equipment needs repaired, it should not be used.

Further information on the safe use of vehicles, machinery and equipment can be found in OSHJ-CoP-13: Safe Work Equipment.

5.2.1 Tractors

Due to the size of tractors; their weight, speed and their power, they present significant risks to operators and employees in close proximity.

Tractors can be very unstable when travelling on uneven or across sloped ground and are at risk of overturning. Tractors should be fitted with roll-over protective structures (ROPS) to provide protection for the operator should the tractor overturn. Where there is a significant risk to the operator from falling materials, tractors should be fitted with falling object protective structures (FOPS).

The entity should ensure employees safety with the implementation of the following control measures, including but not limited to:

- Ensuring tyres are inflated to the correct pressure;
- Reducing speed when driving across uneven or sloped ground and always wear a seatbelt;
- The driver should always hold onto the steering wheel if the tractor overturns and never try and jump from an overturning tractor;

- Operators should always turn off the engine before leaving the tractor;
- Ensuring the tractor has ROPS and where required FOPS are fitted.

5.2.2 Tractor Attachments

Tractor attachments can be attached via the use of a powered hitch which picks up the tow-ring of trailers and other attachments which then allows them to be towed behind the tractor.

The entity should ensure employees safety with the implementation of the following control measures, including but not limited to:

- Ensuring no one is standing behind a tractor when it is reversing;
- Ensuring the area between the tractor and attachment is clear when using the pick up hitch;
- Never allow anyone to stand on the pick up hitch when in use.

Tractors have the ability to power attached machinery via the power take off (PTO) which revolves at high speed when engaged and can cause entanglement from clothing, hair or limbs.

The entity should ensure employees safety with the implementation of the following control measures, including but not limited to:

- Always ensuring the tractor engine is turned off before attaching or removing the PTO shaft;
- Ensuring that the area between the tractor and the attached implement is clear when the PTO is engaged;
- PTO shafts without guarding in place should be removed and repaired.

Power Loaders and excavators can be attached to tractors and are powered by hydraulic pressure and PTO. When using these attachments care has to be taken to ensure the attachments are correctly attached and balanced when in use.

The entity should ensure employees safety with the implementation of the following control measures, including but not limited to:

- Ensuring the tractor is on level ground and balanced with outrigger support before using the excavator;
- Do not operate near or under power cables.

5.2.3 All Terrain Vehicles (ATVs)

All-terrain vehicles or quad bikes are used on many farms, they have low pressure tyres, a straddle seat and are steered by handlebars. Similar to tractors, when used on uneven or sloping ground they can be unstable and overturn. Due to the weight of the ATV when it overturns it can crush or pin the operator underneath resulting in injuries to the head, neck, chest and limbs.

The entity should ensure employees who use ATVs with control measures, including but not limited to:

- Reducing speed;

- Wearing a transport safety helmet;
- Ensuring tyres are correctly inflated;
- Avoiding use of them on uneven or sloping ground.

5.2.4 Trucks

Deliveries to and from farms will occur regularly for feed, materials and movement of animals. Good traffic management is required to reduce the risk of employees being struck by trucks, objects falling from the truck or the truck overturning. The entity should ensure employees are protected from these risks with control measures, including but not limited to:

- The access to the farm should be suitable for the size of the truck, the ability to manoeuvre the truck and an area sufficient to load and unload with segregation from employees wherever possible;
- Ensuring employees are clear from loading or unloading area during these operations.

5.3 Maintenance

The entity should maintain all farm vehicles, machinery and equipment in good working order which should be regularly checked.

The entity should consider the following control measures, including but are not limited to:

- All movement has stopped before removing any guarding;
- Employees are competent to carry out maintenance;
- Adequate tools and instructions are provided for maintaining, adjusting, cleaning and unblocking machinery and equipment;
- Stored energy from compressed material, springs or hydraulics is released safely prior to maintenance starting;
- Hydraulically raised machines or parts are supported by using jacks or props when working under them.

The entity should consider the following control measures, when undertaking maintenance on all farm equipment, including but are not limited to:

- Always making sure the brakes are applied and wheels are chocked;
- Raised bodies are propped;
- Starting and running engines with brakes on and in neutral gear;
- Using axle stands for working under vehicles, when wheels are removed;
- Ensuring no ignition sources are present when draining fuel.

The entity shall record and retain maintenance and inspection records.

Further information on maintenance can be found in OSHJ-GL-01: Mobile Plant.



5.4 Selection and Safe Use of Farm Machinery and Equipment

The entity should select suitable equipment for the work activities and use the manufacturer's manual on how to use, service and store equipment.

The entity should consider the following measures when selecting farm machinery and equipment, including but are not limited to:

- It is suitable for its intended use;
- Drivers should have good visibility;
- It is safe and easily accessible to perform maintenance on;
- Instructions are provided on how to perform maintenance;
- Training employees to operate the machine or equipment safely.

The entity should ensure the following when using farm equipment, including but not limited to:

- Never allow employees to use machinery or equipment unless they know how to use it safely and have received adequate training;
- Never allow employees to clear blockages or clean a machine unless the machine has stopped, the drive is disconnected and all power and hydraulic systems de-energised.

Further information on the selection of machinery and equipment can be found in OSHJ-CoP-13: Safe Work Equipment.

5.5 Livestock

Livestock encompasses all forms of farm animals ranging from larger animals such as camels, horses and cows, to sheep and goats to smaller animals like poultry.

Animals are a major cause of injuries and fatalities on farms, caused by animals who can be unpredictable in their nature kicking, butting and goring employees resulting in injuries to the head, chest and limbs. Animals can be unpredictable when moving, separating and handling outside of their normal routine, when pregnant or newly calved animals can become very agitated and pose an increased risk to employees.

The entity should ensure employees safety with the implementation of following control measures when animal interactions are required, including but not limited to:

- Good handling facilities will ensure employees are safely segregated from animals;
- Restrict employees from entering animal pens or fields when working alone;
- Ensuring animals are handled by familiar persons, in familiar surroundings, working quietly and calmly to reduce animal stress;
- Avoid handling male animals wherever possible, separating or removing male animals from the herd should only be done in good handling facilities.



5.6 Personal Protective Equipment (PPE)

Suitable clothing and PPE for the work activities on a farm will depend on the work being conducted. The assessment of employees work activities should allow the entity to identify and provide the correct PPE to employees:

The entity should consider the PPE as the last line of protection and introduce other means of protection first, such as engineering controls providing long term solutions. The entity should involve employees in the process of selecting PPE, employees typically have better knowledge of work activities and their input can help the entity choose the most effective PPE.

Further information on use of PPE can be found in OSHJ-GL-07: Personal Protective Equipment.

5.7 Falls from Height

Falling from height is the leading cause of serious injuries and fatalities on farms. These occur when jumping on and off farm vehicles, working from raised platforms, ladders or being struck by items falling from height.

The entity should consider the following control measures when working at height, including but not limited to:

- Avoiding work at height whenever possible;
- Always climb down the steps from a farm vehicle in the reverse direction ensuring three point contact at all times;
- Ensuring ladders are in good condition, long enough for the work activity, tied and/or footed to prevent slipping and three points of contact maintained at all times when in use;
- Ensuring scaffolding and work platforms are erected, maintained and dismantled by competent personnel with adequate training and experience;
- Ensuring mobile elevated work platforms are only operated by competent personnel.

Further information on Working at Height can be found in OSHJ-CoP-04: Work at Height Safety.

5.8 Drowning or Asphyxiation

5.8.1 Drowning

Slurry is a mixture of water and small pieces of a solid, farm slurry is the organic waste product from livestock which is then collected and stored.

Drowning in slurry and water storage is a common cause of death among farm employees, slurry can be stored in open tanks, slatted tanks and lagoons.

The entity should consider the following control measures when there is risk of drowning identified, including but are not limited to:

- Open slurry tanks and lagoons should be protected by fencing at least 2 meters high with locked gates to prevent unauthorised access;

- Covered or slatted tanks should have access that cannot be opened easily, preferably in the form of a lockable manhole cover, with a safety grid fitted below the manhole cover for secondary protection.

5.8.2 Asphyxiation

Slurry stored in a tank will decay over time producing dangerous mixes of potentially lethal and highly flammable gases, including methane, ammonia, hydrogen sulphide and carbon dioxide. All of these gases are heavier than air and will accumulate at the bottom of tanks, even when they are empty. These gases can also be odourless and as they are highly toxic one breath can be enough to cause instant death. Secondary deaths can then also occur when a worker tries to save the unconscious person and they are also overcome by gases. These gases can be especially dangerous when agitating slurry to mix the solids and liquids before pumping out of the storage area.

The entity should consider the following control measures when there is risk of asphyxiation identified, including but are not limited to:

- Ensuring all employees and animals are evacuated from the area;
- Agitating only on days with good air movement;
- Ensuring all employees stay clear from the area for one hour after agitation has finished;
- Ensuring no naked flames are used as gases are highly flammable;
- If you suspect someone has been asphyxiated, stop agitation immediately, call emergency services and wait for assistance, do not try and attempt to rescue the unconscious person.

5.9 Overhead and Underground Services

Overhead and underground high voltage cabling requires care when working in these areas.

The entity should consider the following control measures when overhead and underground services are suspected in the work area, including but not limited to:

- Cranes, diggers, tractors with loaders and tipping trailers should not operate in areas with overhead cables;
- Advise contractors prior to work commencing where overhead and underground cables are and agree a safe working distance;
- Take into consideration that humid weather can allow electricity to arc larger distances than normal.

Further information on overhead and underground services can be found in OSHJ-CoP-09: Overhead and Underground Services.

5.10 Hazardous Substances

Farming utilises many different chemicals such as fertilisers, oils, disinfectants, detergents and crop chemical products of insecticides and fungicides. If chemicals are not used safely then employees could be at risk especially if suitable safety precautions have not been implemented.



Exposure to chemicals can result in adverse effects to health such as cancer, skin rashes, burns, lung, liver and kidney disease. Employees need to know how dangerous chemicals are, and how to ensure the necessary controls are in place to protect employees and to protect the working environment.

The entity should ensure that the employees understand what chemicals they work with, this information should be supplied in the form of a hazard label and a safety data sheet with each chemical.

5.10.1 Understanding the Hazard Label and Safety Data Sheet

The entity should ensure that the employees know how to recognise if a chemical is dangerous by understanding the hazard label and the information on the safe use, storage and disposal contained in the safety data sheet (SDS)

Further information on safety data sheets, chemical transport, storage, use and disposal can be found in OSHJ-CoP-11: Management of Hazardous Substances.

5.11 Occupational Health of Farm Employees

The main causes of ill health associated with farm employees are manual handling, lung disease, infections and noise.

Further information on disease and noise can be found in OSHJ-CoP-14: Management of OSH Illness and Disease.

5.11.1 Manual Handling and Ergonomics

Farm employees generally have an active working life with diverse daily activities, however some of these physical activities increase the risks of injuries, including but not limited to:

- Highly repetitive bending, twisting or stooping;
- Bad posture during lifting activities;
- Lifting, moving or pulling awkward, bulky, heavy loads;
- Sitting for long periods of time operating tractors or farm machinery.

Good lifting and handling techniques, include but are not limited to:

- Remove obstacles from the planned route;
- When moving objects over a long distance, plan to rest the load on a table or bench and change grip;
- When lifting ensure a stable posture with feet splayed, bend knees, keep the back straight and keep the load close to the waist;
- Keep the heaviest side of the object close to the body.

Further information on manual handling and ergonomics can be found in OSHJ-CoP-12: Manual Handling and Ergonomics.

5.11.2 Lung Disease

Farm employees exposed to dust and spores which are inhaled into the lungs can cause acute and long term illness. Dust can be found in feed, grain, mushroom compost, straw and

hay, dampness causes mould in these substances which generates spores which can then be inhaled affecting lung tissue. Inhaling spores and dust over long periods of time can lead to permanent damage to lung tissue, smoking multiplies the damage to lung tissue and can lead to permanent shortness of breath, allergic reaction and occupational asthma.

The entity should consider the following control measures when lung diseases are suspected, including but not limited to:

- Avoiding work in buildings with poor ventilation;
- Always ensure buildings, grain stores are ventilated prior to working in them;
- Avoiding opening bales of hay and straw as this releases dust and spores;
- Wear suitable filtering face masks.

5.11.3 Infections

Zoonoses are diseases and infections that are transmitted between animals and employees, these include diseases that are fungal, bacterial, parasitic and viral and can be transmitted through absorption, inhalation and ingestion.

The entity should consider the following control measures when infectious diseases are suspected, including but not limited to:

- Reduce contact with animals and use adequate PPE;
- Maintaining good animal welfare;
- Vaccinating animals;
- Covering wounds, cuts and scratches;
- Employee immunisation;
- Maintaining good personal hygiene.

5.11.4 Noise

Farm employees exposed to noise from operating tractors and machinery can experience high levels of noise over short and long periods of time. Excessive noise can cause permanent damage, known as noise induced hearing loss which can occur when the cochlea is damaged. The cochlea cannot easily be repaired and hearing can be permanently lost.

The workplace exposure limit at which employers must provide hearing protection is 85 decibels. Noise levels should be kept below 85 decibels where-ever possible.

The entity should consider the following control measures for reducing the noise hazard in the workplace, including but not limited to:

- Purchase equipment and machinery with low noise level ratings;
- Ensure exhausts, baffles and silencers are maintained to reduce noise;
- Isolate or enclose fixed equipment and machinery;
- Employees shall restrict the amount of time exposed to noise, maintain a safe distance from noise source and wherever possible isolate themselves from noise;



- As a last line of defence employees should wear suitable ear defenders in noise affected areas where exposure to noise in excess of 85 decibels is present.

6 Training

The entity should provide safety in farms information and training in languages and in a format that employees understand. Training for employees exposed to the hazards of farms, includes:

- Training employees on how to work safely, including arrangements for reporting incidents, fire and first aid;
- Training for temporary employees who are unfamiliar with workplace hazards;
- Ensuring employees changing jobs or being promoted are kept up to date with new safety and health requirements;
- Additional training provided when new technology, machinery or equipment is introduced;
- Skills may decrease over time, or bad habits may develop and employees may require refresher training.

Periodic refresher training should be conducted to ensure employees competency is maintained, including but not limited to:

- Where training certification has expired;
- Where identified as part of a training needs analysis;
- Where risk assessment findings identify training as a measure to control risks;
- Where there is a change in legal requirements;
- Where incident investigation findings recommend refresher training.

The entity must record and maintain accurate training records of OSH training provided to employees.

Further information on training can be found in OSHJ-GL-26: Training and Competence.

7 Emergency Preparedness and Response

The entity should have an emergency response plan appropriate to potential emergencies related to farm activities. When developing an emergency preparedness and response plan, the following factors should be considered, including but not limited to:

- The location of the farm;
- The nature and type of work activities being conducted on the farm;
- The number of people working on the farm.

The entity shall ensure that the emergency plan considers the following, including but not limited to:



- Emergency response personnel are available, who can take charge and make decisions on behalf of the entity during an emergency and liaise with emergency services;
- Emergency response personnel are available, who are familiar with the work area ensuring the prompt evacuation of the workplace in the event of an emergency;
- Adequate firefighting and first aid equipment is available for the type of work activities in the farm;
- Employees are trained in emergency response, including information of first aid arrangements and where first-aiders, first aid equipment and facilities are located;
- Employees are appointed as first-aiders and available at each location and on each working shift.

Further information on first aid can be found in OSHJ-CoP-16: First Aid at Work.

Further information on developing an emergency plan can be found in OSHJ-CoP-18: Emergency Preparedness and Response.

8 References

OSHJ-CoP-01: Risk Management and Control

OSHJ-CoP-04: Work at Height Safety

OSHJ-CoP-09: Overhead and Underground Services

OSHJ-CoP-11: Management of Hazardous Substances

OSHJ-CoP-12: Manual Handling and Ergonomics

OSHJ-CoP-13: Safe Work Equipment

OSHJ-CoP-14: Management of OSH Illness and Disease

OSHJ-CoP-16: First Aid at Work

OSHJ-CoP-18: Emergency Preparedness and Response

OSHJ-GL-01: Mobile Plant

OSHJ-GL-07: Personal Protective Equipment

OSHJ-GL-26: Training and Competence

9 Document Amendment Record

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