



Guidance on Ground Maintenance at GAA Grounds

19/01/2012

Address **Willis Risk Management (Ireland) Ltd**
Grand Mill Quay, Barrow Street
Dublin 4

Telephone 00 353 (0)1 669 4471
Fax 00 353 (0)1 669 4493
E-mail cunninghamf@willis.com

Willis

Job title Ground Maintenance Guidance.Doc	Job number
---	-------------------

Document title Ground Maintenance Guidance.Doc	File reference Clinets/GAA
--	--------------------------------------

Revision	Date	Filename	Ground Maintenance Guidance.Doc	
0	19.01.12	Description	Draft Issue	
			Prepared by	Reviewed by
		Name	Fearghal Cunningham	Michael Gleeson
		Description	Issue	
			Prepared by	Reviewed by
		Name		
		Author's Signature		
		Filename		
		Description		
			Prepared by	Reviewed by
		Name		

TABLE OF CONTENTS

1.	Introduction	4
2.	General Requirements	5
2.1	Slopes	6
2.2	Manual Handling	7
3.	Hand Tools	8
4.	Trimming Equipment	9
4.1	Strimmers	10
4.2	Hedge Trimmers	11
5.	Mower Safety	12
5.1	Riding Lawn Mowers	13
5.2	Walk-Behind Mowers	13
6.	Chain Saw Safety	14
7.	Power Blowers	15
8.	Chemical Products	16
8.1	Using Plant Protection Products (Pesticides)	16
8.2	General Chemical Safety Precautions	17
9.	White Line Marking	18
9.1	Suitable Line Marking Compounds	18
9.2	Use of Herbicides to Reinforce Line Markings	18
10.	Electricity and using Electrical Equipment	19
10.1	Overhead lines and underground cables	19
10.2	Fixed Electrical Installations	19
10.3	Portable equipment	19
11.	Painting and Working at Heights	20
Appendix 1:	Training Acknowledgement form	21

1. Introduction

This Guidance note has been prepared to assist GAA Clubs in managing risks associated with Ground Maintenance. Ground maintenance tools and mechanical field care devices, such as lawn mowers, power blowers, and chain saws, present special safety concerns for grounds maintenance personnel.

Common Ground Maintenance accidents include the following:

- Cuts, lacerations, or amputations from whirling mower blades.
- Bruises or broken bones from flying projectiles.
- Burns from hot equipment parts
- Electrical shock from faulty grounding or defective electrical cords
- Back strain from improper equipment usage
- Slips, trips, and falls

In addition due to the volunteer nature of the GAA, these risks are further exacerbated due to reduced resources for training and the absence of an employer employee relationship between the club and the persons performing the work.

Where resources allow, we recommend that competent professionals are employed to perform Ground Maintenance at the GAA facility. In recognition that this is not feasible for many GAA clubs this guidance provides recommendations for performing ground maintenance work and training.

The club should refer to their Safety Statement and ensure that all activities are covered by the Club's risk assessments. It may be beneficial to supplement the club risk assessments with information contained in this guidance note.

The intention is that a member of the GAA club would be responsible for ensuring that all personnel undertaking Ground Maintenance work receive training prior to performing the work. For activities such as strimming, ride-on mowers, walk behind mowers, power blowers, hand tools and line marking, the training will consist of the following:

- Read the relevant sections from this Guidance Document (General Requirements and Specific Section)
- Demonstration of the use of the equipment by someone familiar with its correct operation (including Starting, Stopping, Emergency Stop, Clearing Blockages, Correct Way to Handle the Equipment.
- Discussion on any concerns the user has or comments.

Arising from the discussion, if the risk assessment needs to be updated, this should be done immediately.

As stated in this document, the use of tractors, chain saws and work vehicles should only be undertaken by competent personnel who have received detailed training and where applicable a licence to operate the equipment. Failure to adhere to this will increase the risk of an accident and is likely to leave the club open to legal action.

2. General Requirements

Persons requested to perform Grounds Maintenance Work should be a minimum of 18 years of age. This restriction particularly applies to the use of electrical and mechanical equipment such as trimmers, lawnmowers, rotavators, etc and the use of chemicals such as herbicides, pesticides and white line parking paints and chemicals.

Persons requested to perform Grounds Maintenance Work should be provided with the relevant sections from this manual and a designated representative from the Club should ensure the person reads and understands the contents of the relevant section. We recommend that the person signs to acknowledge this as per the form in Appendix 1.

In addition to going through the relevant sections of this document, the person should also be provided with a practical demonstration on how to use the equipment correctly. This may include:

- Starting
- Stopping
- Emergency Stop
- Correct Way to Handle the Equipment

Regardless of the type of Ground Maintenance equipment you use, the following basic guidelines should be followed to ensure optimum safety:

- Read the equipment owner's manual.
- Use the right equipment for the job at hand.
- Inspect the equipment before each use.
- Know how to control and stop the equipment quickly.
- Wear personal protection equipment, as necessary:
 - o Eye protection
 - o Hearing protection
 - o Long pants
 - o Sturdy shoes
 - o Work gloves
 - o High visibility clothing
- Apply sunscreen to exposed areas of skin:
- Be careful to avoid fatigue and heat stress:
 - o Drink plenty of water
 - o Take breaks
- Do not operate powered equipment if you are tired, sick, or taking medication.
- Take special precautions when working with electrical equipment. If you are using an extension cord, take care not to accidentally cut it.
- Do not smoke around gas powered equipment. Allow hot equipment to cool before refuelling.
- Make sure that all guards are in place and in good condition.

Keep pedestrians and bystanders at least 10 metres away when using powered equipment.

Follow manufacturer's instructions prior to conducting maintenance activities on any equipment. Only perform maintenance activities specifically allowed in the manual, all other maintenance activities should be by a professional. All equipment should be disconnected from its power source and any stored energy released before commencing maintenance.

Operators should always check that the safety systems are working correctly before using the machine (pre-use safety checks). Methods of checking safety systems will vary from machine to machine; operators should always be able to check in the operators' instruction book to find the relevant information. Safety systems should never be disconnected or interfered with in any way that may render them inactive.

Operators should not start machinery or use any controls unless they are seated or working in the correct operating position. Machinery should always be left in a safe condition and should not be able to be started by unauthorised people, i.e. the safe stop procedure that includes the removal of the keys.

Do not store large quantities of petrol at the club. Only store enough sufficient to your immediate use and storage container should be approved for the storage of petrol and contained in a fire-proof cabinet. A Carbon Dioxide Extinguisher should be maintained close to the storage area. Storage of 120 Gallons (275 litres) requires a Local Authority Licence.

2.1 Slopes

Tractors and self propelled machinery can overturn or lose control, when working on slopes, uneven ground, near ditches or bunkers. Incorrect loading, weight distribution, poor or incorrect maintenance, turning on slopes and unsafe driving practices will increase the risk of an overturn or loss of control accident. Remember there is no such thing as a 'safe' slope. Operating on grass slopes requires particular care as grass is likely to be very slippery especially when wet.

Tractors are required to be fitted with a safety cab; roll frame or roll bar. These will give the driver some protection in the event of an overturn, however if there is a risk of injury to the operator due to contact with the cab during an overturn then seat belts or other restraining system should be fitted and worn. Only competent trained and licenced persons should drive tractors. Under no circumstances should volunteers or other casual staff be allowed to drive the tractor.

Self propelled machinery (mowers, turf maintenance machines, dumpers, excavators and work vehicles) should be fitted with roll over protection (ROP's) if there is a risk of the machine overturning. With these machines it is essential that seat belts are also fitted and worn, as in the event of an overturn the operator would be likely to be thrown from the seat and be crushed by the machine or its roll over protection. As with tractors under no circumstances should volunteers or other casual staff be allowed to drive turf maintenance machines, dumpers, excavators and work vehicles.

Using hand held and pedestrian controlled machinery on slopes may also be hazardous. Problem areas will include:

- operators slipping on the slope, this may lead to injuries directly associated with the fall and also from making contact with moving parts on the machine e.g. mower blades, strimmers lines and blades and hedge cutter blades
- increased risk of operator injury due to working on slopes, these will generally affect ankles and knees but may also have an adverse effect on back, necks and shoulders
- the machine sliding or overturning on the slope
- increased risk of objects being ejected from the machine

As part of the initial training, operators should be informed of dangerous slopes at the ground or its perimeter and where no-go areas have been identified, these should be clearly identified to the operator. The information session should emphasise the need for care and concentration when working with equipment and, in particular, the importance of paying attention to changes in ground conditions, e.g. potholes, gravel or other factors which may affect the safety of the operation.

Routine checks and maintenance will help to ensure that:

- brakes on self propelled machinery are correctly adjusted and working efficiently. Independent brakes should be linked whenever braked steering is not required;
- any safety devices or warning systems are operating correctly
- steering is maintained so that there is no excessive free movement and no unnecessary play on the front wheel bearings;
- tyres are inflated to the correct pressure and have adequate tread. They should not be used if they have suffered damage, which could affect their safe use.

2.2 Manual Handling

Any operation that involves using bodily force to move an object, this could include; lifting, lowering, pushing, pulling or carrying. Examples could include; handling bagged materials, machinery, moving machine components, moving goal-posts, moving sandbags, carrying machinery; hedge cutters, strimmers, pushing barrows, shovelling heavy bulky materials, loading/unloading trailers.

In industry, manual handling causes a quarter of all injuries and nearly a third of 'over 3 day' absence injuries reported to the Health and Safety Authority. Many injuries are caused by incorrect lifting methods, awkward shape of the load or lack of handles. In addition to acute injuries, chronic injuries to the back, lower limbs and neck can occur from prolonged periods of lifting of heavy loads, over months or years. Incorrect lifting techniques, poor posture, frequency and duration of lifting all contribute to the development of long-term musculoskeletal problems. Injuries can be painful, for example where spinal injury occurs.

In a work context, an employer is obliged to risk assess all manual handling tasks and provide persons performing manual handling with training. In relation to the GAA club, we recommend that the club considers arranging for a manual handling training course to be provided to club members who perform ground maintenance activities, or help out with restocking the club-house, bar, training gear or involved in setting up portable goal-posts etc.

The over-arching principle should be that if any member, volunteer or casual worker does not feel that they can lift something safely without risk to themselves then they should not lift it. If two persons are performing a lift together, it is imperative that one person takes charge so that the lift is synchronised, particularly in terms of lifting the object and when setting it down.

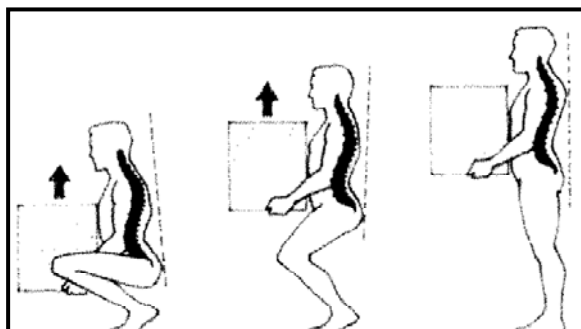
Where practicable actions should be taken to reduce the risk of manual handling injuries for example using mechanical aids, lower weights of sacks/drums, changes to systems of work etc. The club may also need to include such changes within its medium term financial planning so that physical changes can be made e.g. yard surfacing, additional storage space, and equipment purchased that will actually reduce the amount of manual handling work.

You should refer to the Club Safety Statement for further information on Manual Handling.

Lifting weights that are too heavy or just lifting weights the wrong way, can result in permanent back damage. This damage can be immediate more likely; the back pain will show up over time. It is very easy to avoid this back damage. It just takes good practice and common sense.

Remember....

- Get a good grip; keep the load close to your body.
- Keep your back straight.
- Bend your knee; lift with your leg muscles not your back.
- If it is too heavy don't struggle, get help.
- If there is a lot of manual handling involved in your job obtain mechanical aids to reduce the risk of back injury.



3. Hand Tools

Although Ground Maintenance hand tools tend to be safer than powered equipment, common gardening tools, such as rakes, shovels, and hoes cause many injuries each year. Follow these guidelines for using Ground Maintenance hand tools.

- Keep hand tools in good condition. Replace split or rotten handles. Keep blades sharp.
- Buy quality tools that fit your needs and your build. For example, if you are tall, choose tools with handles that are long enough to prevent you from stooping over your work.
- Never leave a rake, shovel, or hoe on the ground facing up. Foot injuries from exposed metal and head injuries from handles that pop up unexpectedly are the main hazards associated with these tools.

Do not

- Persevere with a damaged or blunt tool. Stop work and inform the club that the tool needs to be replaced or repaired.
- Indulge in any horseplay with tools.
- Do not leave tools lying around where they may be picked up by children. Always return them to the correct, secure storage area.

4. Trimming Equipment

The following are the principles hazards associated with trimming equipment:

- Severe cuts and possible amputation injuries.
- Fire during refuelling.
- Being struck by flying debris
- Injury to third parties in close proximity to where work is being done

Follow these safety guidelines for trimming equipment such as hedge trimmers, string trimmers, grass shears, and edgers:

- Read the manual before first use.
- Avoid touching rocks, debris, and gravel with trimming equipment. These items could cause a serious injury if a kickback occurs.
- Make sure all screws and chains are tight. Vibrating equipment can cause screws to loosen.
- Walk towards your work. Do not back away from your work when using a trimmer.
- Always wear eye and ear protection.
- Wear gloves and sturdy boots (preferably steel toe-capped boots).
- Always carry trimmers and other work equipment by the handle only. Always carry hedge trimmers by holding the front handle so the blade/cutters are point upwards behind you.
- Turn off the machine before cleaning the head if jammed or replacing any parts.
- Ensure that the strap is in place and worn in a comfortable fitting position. Never operate the trimmer without the strap being in place.
- Always use a funnel when refuelling. Do not start the machine where you have refuelled because of the risk of fire from spills. Refuelling should take place at least 5m from ignition sources. Do not smoke when strimming.
- Be aware of the risk of flying debris when cutting on or near gravel. Ensure that people and animals are more than 10m away.
- Personnel approaching people strimming should ensure that they have the operators attention and the equipment is switched off.
- The operator should take a break of at least three minutes every twenty minutes when strimming and trim for no more than 3 hours in a day.
- Ensure good posture is maintained while strimming. Always pull-start the trimmer by holding it steady with your hands (square-on stance), never by your foot.
- Ensure your clothes are snug-fitting, no loose jackets or other loose clothing to be worn.
- Always make sure the throttle rests in the idle position, moves freely and returns correctly before you start.
- Never climb using a trimmer, always work at ground level only. Walk the area beforehand and remove any stones etc. Take additional care on uneven ground.
- Always make sure the hedge trimmers cutters are free to move. Turn off and isolate before cleaning any blockages.
- Hedge trimmers should only be used on ground level or on suitable work platforms.
- Never use the hedge trimmer one handed.
- Never operate the hedge trimmer above shoulder height.
- Never fit blades to the trimmer – use only with cord! Always replace the lock-nut after removing it 10 times.

4.1 Strimmers

Possible hazard	Control measures
Contact with moving parts of strimmer	Suitable guard fitted to blade/cutting line
Being hit by flying stones etc	(i) check area prior to cutting activity to remove stones etc. (ii) wear safety footwear, gaiters, gloves, eye protection (goggles or face shield);
Dust from cutting operation	Nuisance dust – wear suitable dust mask
Fumes from petrol engine	Working outdoors: adequate ventilation
Noise	(i) select equipment to reduce noise (ii) wear hearing protection
Vibration	(i) select equipment to have low vibration characteristics – check manufacturer's data sheet prior to purchase (ii) take a break of at least three minutes every twenty minutes when strimming and strim for no more than 3 hours in a day.
Storage and transfer of petrol	(i) fill petrol tank at start of day (ii) refill only when motor has cooled down (iii) no smoking/no naked flames (iv) store petrol in approved container
Danger posed by traffic	(i) High visibility clothing: "glow" vest or jacket (ii) Use of traffic cones/barriers (iii) Carry out work at quieter times of day (not rush hour)
Extreme weather conditions: (i) heavy rain, etc (ii) hot weather: Sun burn, etc Heat stroke	Wear weather proof clothing Use sun cream with high protection factor Wear head cover: hat with brim, etc Regular breaks in shade Have water/isotonic drinks
Manual handling	(i) Ensure operative capable of managing machine (ii) Do not use if you feel you cannot do so without risk of injury.
Slips, trips and falls	Examine site before starting work to identify hazards
Biological hazards: poisonous plants/animal waste	Wear suitable gloves and always wash when finished the task or taking breaks.

4.2 Hedge Trimmers

- Always wear hedge trimmer harness properly, adjusting straps for comfort, to prevent strain injury.
- Always adjust the handles of hedge trimmer for comfort, to prevent strain injury
- Never climb using a hedge trimmer – work at ground level only, or off a proper work platform.
- Always keep the hedge trimmer blade sharp and tight-fitting. Always keep the blade within its scabbard when not in actual use.
- Always make sure the hedge trimmer cutters are free to move but never use it unless the correct idling speed stops the movement.
- Always carry hedge trimmers by holding the front handle so the blade/cutters are pointing upwards, behind you.
- Hedge trimming is a one-man job. Never work one handed – a hedge trimmer is a 2-handed tool.
- Always wear full impact protection (PPE) against flying branches etc. including mesh visor, ear-muffs, gloves etc.
- Never operate the hedge trimmer *above shoulder height*.
- Always switch off the hedge trimmer fully if it becomes jammed, before freeing it up.

5. Mower Safety

A wide range of mowers are used at GAA Grounds and they vary from semi-mounted tractor trailed or gang mowers to specially designed self-propelled equipment. Mowers may be ground driven or powered through the tractor PTO, driven by vee belts or hydraulic motors.

Mower blades are sharp and can cause accidents. These usually occur when carrying out maintenance or clearing blockages and it is important that operators are provided with information before performing the task.

Rotary and flail mower blades can detach themselves if not properly fitted and maintained or when not changed at intervals specified by manufacturers. All self-propelled mowers are designed to ensure that the blades cease to rotate when the operator leaves the driving seat. Safety checks for the correct operation of these safety devices should be carried out regularly to ensure that they work correctly. It is important to check that the blades have stopped rotating (rundown time) before any adjustment is carried out on the machine.

In all cases if any adjustment is required to or near the blades the machine should be switched off and, if necessary, the power supply isolated. This also applies to smaller pedestrian-controlled mowers.

Pedestrian-controlled rotary mowers are particularly hazardous if allowed to rotate when the machine is stationary. When buying a new pedestrian-controlled rotary mower ensure that it is fitted with a blade brake and/or a 'dead man' handle to stop the rotation of the blades when the power is disconnected.

Rotary mowers present a particular hazard if the guards around the blade are removed or damaged. The hover type of mower which is often used to cut steep banks is also dangerous if not used according to the manufacturer's instructions. Steep banks should not be cut with rigid bladed rotary mowers. There have been a number of serious injuries to operators who have slipped when operating on a steep slope. If operators slip it is possible for their feet to slide under the mower and come in contact with the rotating blades. Wearing steel toe capped boots with good grip will help to prevent serious injuries.

To avoid injury with power mower equipment, you must pay close attention to your surroundings. Whether you use a riding mower or a walk-behind mower, follow these guidelines for lawn mower safety:

- Conduct a pre-mowing inspection of the areas to be cut and remove any debris, rocks, tree limbs, or other items that could become a projectile. Look for concealed hazards such as holes.
- Keep hands and feet away from moving blades.
- Fill the tank with fuel before beginning work. (By filling the tank initially, you can avoid having to fill the tank later when it is hot.)
- Replace loud or faulty mufflers.
- Shut off the engine before unclogging, servicing, or adjusting the mower and before removing the grass bag. For added protection, remove the ignition wire before working on the machine.
- Inspect mower to verify all guards and safety devices are in place and operating properly.
- Always keep others well clear – never allow anyone to assist – always make your own adjustments.

The maximum gradient for grass slopes is 1:4 for safe mowing.

5.1 Riding Lawn Mowers

In addition to the general guidelines for mower safety, follow these guidelines for riding lawn mower safety:

- Before starting the engine, make sure the transmission is out of gear and the mower blade clutch is disengaged.
- Never allow extra riders on the lawn mower.
- Slow down when turning and when working on slopes. Mow up and down slopes rather than across them.
- Always look behind you before backing.
- If you hit a large rock or stump, stop the mower and inspect the blades and shaft. Replace damaged blades.
- Never leave a running lawn mower unattended. Before leaving the seat, park the mower on a flat area, disengage the mower blades, and remove the ignition key.
- Always engage blades only when actually mowing. Never mow in reverse.
- Keep your hands / fingers well clear of all dangerous moving / hot parts (use a stick to poke grass free if you have to poke).
- Always park safely: brake-lock on, blades disengaged and lowered, fuel valve off; wait until fully quiet, withdraw key, get off.

5.2 Walk-Behind Mowers

In addition to the general guidelines for mower safety, follow these guidelines for walk-behind mower safety:

- Wear sturdy shoes (preferably with steel toe-caps) with good traction. Never wear sandals around walk-behind mowers.
- Do not bypass the safety device that stops the blade when the operator releases his/her grip on the handle.
- Mow across slopes rather than up and down slopes.
- Work slowly and patiently when mowing tall grass or tough weeds. Forcing the mower may cause repeated clogs and engine stalls.
- Never leave a running mower unattended. If you stop momentarily, cut the throttle to idle and make sure the mower will not roll away.

6. Chain Saw Safety

Chain saws are ideal for trimming trees and cutting fallen limbs into smaller pieces. Unfortunately, chain saws are associated with many serious injuries each year. Common chain saw hazards include the following:

- Chain cuts
- Falling trees and limbs
- Strains and sprains
- Burns

Only competent trained personnel should use Chain Saws. If the Club owns a Chain Saw they should not allow any person to use it unless they have reviewed the persons training record and the equipment has been correctly inspected and maintained. Acceptable training for the use of Chain Saws is provided by Coillte or similar organisations. If in doubt please contact Sineád Quinn at Croke Park.

To avoid injury, you must respect chain saw hazards and handle chain saws skillfully. In addition to general safety guidelines, follow these instructions for safely using chain saws:

- Stay alert while sawing. Most injuries occur below the waist when the operator is not paying attention.
- Do not use a chain saw alone. Have someone else stand nearby in case of an emergency.
- Choose and inspect your chain saw carefully:
- Use the correct size chain saw for the job at hand.
- Ensure that the chain is sharp and the tension is taut.
- Ensure that smaller chain saws have a safety tip to prevent kickbacks. (Kickbacks cause one third of all chain saw injuries.)
- Wear a hard hat to protect you from falling limbs.
- Always operate a chain saw with two hands.
- Limbs that are at shoulder height or higher present a special safety problem. Use a ladder so that the saw is at a lower and safer position relative to your body.
- Never allow the tip of a running chain saw to touch the ground. This could cause a serious kickback injury.
- To avoid kickback injuries; stand to the side of a running chain saw. Do not stand directly behind it.
- Move brush and limbs as you work to maintain a clear operating area.
- Never force a chain saw through a limb.
- Never stand on a log or limb while cutting it.

7. Power Blowers

Because power leaf blowers produce air gusts up to 200 mph, you must follow all manufacturers' safety precautions. Always walk towards your work when using a power leaf blower. Do not back away from your work.

Always wear hearing and eye protection when operating a blower.

Specific safety measures are contained in "OPERATOR'S MANUAL" – all users must study these, especially the safety section at the beginning. The following general rules also apply...

- Use back-pack with adjustable straps.
- Always adjust the straps correctly to suit yourself, or the individual using the equipment.
- Always wear appropriate PPE, including ear defenders.
- Take frequent short **breaks** to avoid muscle strain (stretch, yawn and, while holding a waist-high bar or similar, stretch out each leg until it is straight with your toes on the ground). *Remember a long break after long use is nowhere near as effective as regular short breaks.*

8. Chemical Products

Proprietary made products containing hazardous substances will be easily identified by hazard warning symbols on the product label and information in the Safety Data Sheet (SDS).

We recommend that for any Chemicals used by the club that the club refers to the SDS and identifies where and how the substance is used, handled and stored and how the adverse effects of the substance (hazard) may be eliminated or controlled.

8.1 Using Plant Protection Products (Pesticides)

Pesticide products are wide ranging and include fungicides, herbicides, insecticides, growth regulators, pest control products, rodenticides and wood preservatives. The manufacturer's instructions and conditions of use should always be followed.

Pesticides are approved for a particular "field of use"; agriculture, horticulture (including amenity horticulture), industrial and in or near water. It is essential that only pesticides approved for a particular field of use are used.

The UK Code of Practice for the Safe Use of Plant Protection Products (www.pesticides.gov.uk) introduced in January 2006 provides further detailed information on the use of pesticides. Spraying equipment must be maintained in good condition and calibrated regularly to establish correct application rates.

The pesticide product label is the key link between the manufacturer and the user; the product label should always be read and complied with. It is a legal requirement to comply with "Statutory Conditions for Use."

The disposal of pesticide waste should also be considered, this will include; empty containers, washings from machinery and equipment, used and contaminated protective clothing and pesticides in diluted or concentrate form. Further details can be found in the Code of Practice.

All pesticides should be stored in a suitably constructed, secure bin, cabinet, chest or vault capable of resisting fire for at least 30 minutes and robust enough to withstand reasonably foreseeable accidental impact and be secure against theft and vandalism. If kept outside it needs to be waterproof and frost proof. The pesticide store should be identified by a cautionary warning sign and smoking prohibited in the area. For large quantities of pesticides, containers specifically manufactured to comply with the legislative requirements for storage are available on the market.

Personal protective equipment to be worn when spraying pesticides should include the following:

1. Eye protection (Safety glasses or goggles).
2. Gloves
3. Disposable Tyvek (or similar) suit
4. Waterproof boots or Wellingtons

8.2 General Chemical Safety Precautions

- Chemicals with TOXIC or CORROSIVE warning labels to be stored in a **locked cabin or press** particularly so that young persons cannot have access.
- Knapsack-type carriers and correct-type **respirator masks** should be provided and used for **spraying herbicides** etc. Though the driver of tractor-mounted sprayers has some protection from an enclosed cab from spray mist carrying in the wind; he should still wear a mask.
- **Use the material only as recommended** – never decant a chemical into an unmarked or incorrectly marked container. Equally, never fill water into a container previously used to hold a chemical!
- Never use a substance / chemical without first **reading the label** and studying the hazards and precautions stated
- Refer to the Safety Data Sheet (**SDS**) and seek advice from the supplier if in doubt.
- Wear all the protective clothing and equipment (**PPE**) recommended.
- Always keep the **lid tightly closed** on all chemical containers except in actual use.
- Never pour **flammable liquids** (e.g. fill petrol-driven power tools) indoors or near any source of ignition – always pour in the open away from combustible material. **If petrol is spilled** on your clothes change immediately!
- Provide Safety containers (e.g. metal spill-proof Jerrycans) for **storing petrol** – store minimum quantities only!
- Know what action to be taken in the event of small and/or large **spills**.
- **Dispose of old chemicals** / containers properly – use the correct waste container and avail of licensed toxic waste disposal services.
- **Dilute** pesticides, insecticides, herbicides etc in the correct proportions and in the correct order, in strict accordance with manufacturer's instructions.
- **Do not mix** chemicals together, even for disposal unless clear instructions are obtained from an expert.
- **Dispose** of used containers safely and in accordance with guidelines where given.

9. White Line Marking

9.1 Suitable Line Marking Compounds

9.1.1 Permanent paints

Based on pigmented viscous liquid. These “paints” can be applied either in a diluted form or neat.

9.1.2 Powders

There are various non-toxic whitening powders available which are based on ground natural calcium carbonate and can be used wet or dry. They are safe to use provided Chemical Safety principles are applied. Under these principles the user will be required to wear gloves and eye protection and to wash off any contact with the skin as a precautionary measure. Most powders are supplied in a fine form.

Hydrated Lime (Calcium hydroxide) should never be used for line marking. It is toxic and can give rise to chemical skin burns and irritations. It can cause serious damage to the eyes and skin on contact in both its dry or wet form. Its use is not recommended under any circumstances.

9.2 Use of Herbicides to Reinforce Line Markings

Historically many grounds-men and club members used various herbicides mixed in with whitening compounds to keep the lines in longer and more visible during the winter playing season. It is, however, only permissible to use a herbicide which is approved for use on sports turf, and this is likely to be a total herbicide. Chemical Risk Assessments must be carried out prior to any application. We recommend that persons applying herbicides have received formal training.

Any herbicide product for line marking must be used within the manufacturer's instructions. There should be no risk to players by contact or transfer of the active herbicide to any part of the body.

The addition of herbicides to whitening materials is not a recommended practice unless carried out by a competent, certificated person.

Creosote is another compound used in the past to mark and reinforce line markings it is not recommended under any circumstances.

The use of Hydrated Lime, herbicide additives and creosote can result in serious injury to players, which can ultimately lead to actions against both clubs or individuals. Play safe – use only safe and approved compounds that are currently available on the market. Do not use old compounds.

10. Electricity and using Electrical Equipment

10.1 Overhead lines and underground cables

Electricity can arc over from overhead power lines to nearby objects, for example, ladders, irrigation pipes, trailers and other high reach machinery, the results can be fatal. There is particular danger to anyone working close to an overhead line with:

- ladder
- a tractor with a front loader
- fork lift trucks
- loading shovels
- tipping trailers and lorries
- or any other equipment working near the line.

If any bulk material is delivered to the GAA Club, it is essential that any load is tipped at least 10 metres from any line to avoid the risk of possible contact or flash over. Care also needs to be taken if digging holes and trenches in case of buried live cables. It is essential that the location of underground cables is identified before using mechanical diggers or trenchers. This can be achieved by the use of maps and site plans, safe digging or using cable finding equipment. If any doubt about cable location exists it is always advisable to contact the ESB before starting any work close to overhead lines or buried cables.

The use of Excavators and other Mechanical Digging equipment requires competed trained personnel and is outside the scope of this Guidance.

10.2 Fixed Electrical Installations

All fixed electrical installations should be designed, installed, operated and maintained to prevent electrical danger. The Institution of Electrical Engineers (IEE) produces guidance on the inspection and testing of fixed installations. Only qualified Electricians should work on electrical systems.

10.3 Portable equipment

Portable equipment will need maintaining to ensure that it is safe for use. All equipment should be checked visually on a regular basis, to ensure that cables are in good condition, plugs are sound and correctly attached and fused and the equipment is in general good repair. These checks should be part of an inspection programme but can also be undertaken by the user before and during use. However, no one should carry out electrical work unless they have sufficient knowledge to prevent danger to themselves or others. It is not necessary to employ an electrician to carry out the visual checks.

Hand-held electrical equipment used outdoors, or where there is a lot of earthed metalwork, should where possible be supplied at reduced voltage, i.e. 110 volt centre tapped earth (CTE) system from a safety isolating transformer. If this is not possible the equipment should be connected through a residual current device (RCD), which will cut off the power quickly if there is an earth fault. Such a fault could result in someone receiving an electric shock. The RCD should be checked regularly by pressing the test button.

11. Painting and Working at Heights

Ladders – In general the use of ladders should be avoided unless there is no other means of providing access. Where temporary access is required, use of ladders and step ladders should be carefully considered, and only used for short term access unless there are no practical alternatives. All ladders should be regularly inspected and any old and/or damaged equipment is disposed of safely.

Pole ladders or similar should be positioned at an angle of seventy-five degrees or at 1;4 slope. Ladders should be either footed (securely held at the base) or securely lashed on both stiles at the top, preferably with purpose made clamps, straps or rope. Single ladders must be extended 1m (approx 5 rungs) beyond the work platform.

Aluminium ladders should only be used for light duty work and not be used where there is a risk of contact with live electrical conductors.

Ladders should be robust, defect free and fit for purpose, and not be painted, as paint can hide defects and damage.

All ladders should be checked regularly to ensure that they are in good condition and free from obvious defects.

All ladders to be used on firm stable ground.

Never carry anything in your hands while climbing a ladder, use a tool belt, backpack or similar. Use both hands on the ladder when going up and down. Maintain three points of contact at all times on ladders.

Adhere to the following precautions:

- Never overreach or move the ladder when someone is on it.
- Never place tools on the rungs.
- Never work off the top two steps.
- No more than one person on a ladder at a time.
- Lock stiles of stepladders into correct position and ensure that the stay rope is taut.
- Do not leave stepladders unattended.
- Stepladders should never be straddled (keep both feet on the same step while working).
- Metal ladders should never be used near electricity.
- Never carry anything in your hands while climbing a ladder.

Ladders are only suitable for short duration, low risk work.

The hire in of equipment such as Mobile Elevated Work Platforms (MEWP), scaffolding, etc, increases the legal requirements and we recommend that you consult with the GAA Risk & Insurance Manager (Sinead Quinn) to clarify requirements specific to your circumstances.

It should be noted that the Legal Definition of Construction Work is quite broad and includes refurbishment work, building of walls and external structures and other non-routine maintenance work. There are comprehensive legal requirement contained within the Safety Health and Welfare at Work (Construction) Regulations 2006 and if in doubt you should contact the GAA Risk & Insurance Manager (Sinead Quinn) or Willis directly.



APPENDIX 1: TRAINING ACKNOWLEDGEMENT FORM

Training Acknowledgement Form					
Club		Date			
Trainee					
Trainer					
Equipment Name					
Description					
Training Content Description		Yes	No	N/A	
Ground Maintenance Guidance Manual		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Section: _____
Practical Demonstration		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Comments
- Starting		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
- Stopping		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
- Emergency Stop		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
- Correct Way to Handle the Equipment		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Safety Data Sheet		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Chemical Name: _____
Comments:					
<i>I acknowledge that I have received training and am satisfied that I can use the equipment without undue risk to myself or others.</i>					
Signed		Name (Block Capitals)			
<i>I have provided the training to the best of my ability with reference to the GAA Ground Maintenance Document as necessary.</i>					
Signed		Name (Block Capitals)			