**Plimmerton Croquet Club**

**Safe Work Procedures for C-Dax Boom Spray Unit**

1. **Introduction**

This Safe Work Procedure (SWP) is to be used when operating the C-Dax Boom Spray Unit at Plimmerton Croquet Club (PCC). All members of PCC and its volunteer Approved Handlers **MUST** adhere to the SWP when using the unit. Users must **also** adhere to the SWPs relating to hazardous substances and the mower when using the Spray Unit. This SWP is part of the Hazardous Spray SWP.

Important safety requirements are highlighted in yellow.

**2. Before Starting**

* Read the manufacturers’ instructions carefully
* Follow the instructions at all times
* Make yourself familiar with the controls and proper use of the equipment
* Do not smoke, eat or drink while using or refilling the Spray Unit
* Never allow children or those unfamiliar with these instructions to use the Unit
* Never spray while people, children or animals are nearby.

**3. Important**

* While spraying, always wear substantial footwear and long trousers
* Do not operate the spray Unit barefoot or when wearing sandals
* Use ear protectors and other PPE as appropriate and in accordance with the hazardous substances SWP
* Before using, check that the mower and Spray Unit are in generally good condition.

1. **Preparation for Spraying**
* Check that the toggle switch on the ride-on mower is “off” (up)
* Attach unit to towbar of the Ride-on Mower.
* Connect battery leads from Mower to pump leads at front of Unit.
* Check that the hose from the spray boom to the pump is attached. Also at front of the Unit. (Brass connector)
* Put 10-15 litres of water in the Unit. Replace the large top cap to complete a vacuum seal. Check the sealing ring is properly in place.
* Check the pump is working before adding chemicals
* Switch the pump on (black switch at front of Unit and the toggle switch on the mower) and wait until all spray nozzles are working, then switch off. If water does not flow release the brass coupling until the air lock clears. Take care as the liquid will spray over your hands and clothes. In case of a faulty pump or spray nozzle see below.
* Drive the mower to the tap on the southern side of the lawns to ensure the legal distance is maintained from water ways and frequently used paths. Fill the Unit to about 20 litres.
* Mix the chemicals in a bucket of water
* Add the required quantity of chemical/s. Chemical dosages should be divided by 4 to provide the correct overall dosage when applied with 200 litres of water.
* Fill the tank to the 50 litre mark. Keep the end of the hose under the liquid level to minimise frothing.
* To avoid missing, or double spraying, areas of the lawn it is useful to mark the sides of each spraying strip. The end of the spray boom should pass directly over each mark. The challenge is then to maintain a straight drive down each strip. Alternatively have another person marking the centre distance to the next strip.
* To assist with even coverage, select a speed so that 100 litres covers the whole lawn area. Then repeat in a right angles pattern. Normally close to minimum throttle.
1. **Pump or Nozzle Failure**
* If the pump doesn’t work:
* check the connection of the leads ( there is a small screwdriver in the Clubhouse)
* check fuse in the pull-apart cylinder above the battery of the Mower. (Spare fuses are in the tray within the poisons container.)
* if repairs are unsuccessful drain the Unit and advise the Grounds Superintendent.
* If all spray nozzles are not working properly and it is not possible to clear them drain the Unit and advise the Grounds Superintendent.
* If the above happens when there is a chemical in the tank contact the Grounds Superintend to determine the safest place to drain the unit
1. **Spraying**
* Drive to the edge of lawn and then switch on the Unit’s pump using the mower switch.
* As soon as all nozzles are working commence the spraying run
* It is not possible to accurately adjust the speed when using the John Deere mower. It becomes a judgement call.
* At the end of each strip make a wide circular turn to bring the sprayer back on line for the next strip
* Spray any surplus, remaining in the Unit after the lawns are completed, on the lawn surrounds until the Unit is empty.
1. **After Spraying**
* Refill the Unit with 10 litres of water and spray this across the lawn surrounds to wash out the pump and spray boom.
* Remove the nozzles and nozzle filters and clean thoroughly. You may need to start the pump to force the filters out.
* Remove the side plug and completely drain the spray unit.
* Return the Unit to the Equipment Shed making sure that, when stored, the boom is supported from the centre so that the two ends and the nozzles are clear of the floor.