

Safety Risk Assessment Form

Matuku

This form must be distributed to all persons named in the Owner column, where possible both as a hard copy and electronically


Project/Event:		Bethells Willow spraying at Matuku											
Date:		10 January 2026		Assessor(s):			D. Hall			Department/Area:		Phylogeny RPA	
Activity Describe the activity and the ways in which it could pose a risk		Hazards <i>e.g. personal injury, electric shock, people or objects falling from height, crushing</i>	Persons at risk	Risk before control measures			Controls <i>Describe controls used to reduce risk to a tolerable or preferably acceptable rating</i>	Residual Risk after control measures			Risk control / acceptance actions	Owner <i>Person responsible for the controls</i>	
				Severity	Likeli-hood	SxL		Severity	Likeli-hood	SxL			
1	Aircraft - Military zone	Air traffic incident	Pilots	4	2	8	Notam and all necessary applications before flight	4	1	4	Reduce / Acceptable	D.Hall	
2	Staff/personnel on pontoon in water. Varying water depths. Submerged branches and root structure.	Falling into water	Staff/personnel	4	3	12	Staff equipped with manual floatation device, all staff can swim minimum 50m. Buddy system in or on water. Personnel in visual line of site.	5	1	5	Reduce / Acceptable	D.Hall	
3	Chemical spillage whilst filling tanks.	loading spill	Staff/personnel in loading zone area.	3	3	9	Staff/personnel trained in loading procedures. Filling over spill trays. PPE worn. First Aid kits on site. Eye wash facilities on site. Spill kits on site.	1	2	2	Reduce / Acceptable	D.Hall	
4	Hazardous substance spill - possible injury due to contact with 2s and/ or inhalation of fumes.	Spill	Staff/personnel.	4	3	12	All Substances are low toxicity and stored correctly. Substances located in a suitable area to contain any spills Safety Data Sheets available. First Aid kits on site. Eye wash facilities on site. Spill kits on site. Spill procedure documented. Emergency services if necessary.	2	2	4	Reduce / Acceptable	D.Hall	
5	Increased risk due to the pilot being distracted by public, client or personal devices.	Pilot Distraction	Pilot and observer	4	4	16	Devices for non-operational purposes to be turned off or stowed in vehicle. Barricades in use. Observer to shield the pilot from interruption during flights - especially from the client &/or public.	3	2	5	Reduce / Acceptable	D.Hall	

6	Low flying requires an extreme level of concentration that can increase the rate of fatigue. Low level equates to no safety zone should a mechanical failure occur.	Increased risk due to low flying.	Pilot and Staff / personnel & observers	3	3	12	Pilot trained, approved and authorised for operation. Pilot subject to random drug and alcohol checking. Pilot to familiarise themselves with local landmarks and hazards. Pilot to use spotter/observer/ground crew to assist with depth of field and proximity to trees and /or structures. Telemetry information must, as minimum, indicate altitude above ground (always take off location) and distance from pilot. Multiple pilot operations authorised.	2	2	4	Reduce / Acceptable	D.Hall
7	Risk associated with misinformed safety briefing and/or not following the safety briefing procedure. Critical items might be missed -eg: Permissions being signed off. Spray drift buffers agreed to No Spray/exclusion zones Local hazards & mitigations, Safety roles clarified.	spray non-target, spray across boundary, use wrong chemical	Pilot and Staff / personnel & client, neighbours, observers	3	3	9	Compliance with Standard Operating Procedures. Safety Plans detail safety briefing agenda. Ground crew to ensure safety briefing is completed correctly and all personnel to have signed safety briefing. Exclusion zones verified. Client declaration signed off by client/customer. Any sensitive neighbours to be notified by Matuku	2	2	4	Reduce / Acceptable	D.Hall / Annalily
8	Chemical Drift Across Designated Boundaries & roof tops.	Spray drift	Neighbours Waterways	3	3	9	Compliance with local regulations. Spray buffer zone protocol in place. Notification to neighbours for all spray operations. Flight path configured with setbacks from buildings, sensitive areas, streams, boundaries etc. Use of the correct nozzle setting. CDA nozzles (Controlled Droplet Application. ultra-low volume spray, drastically reduce drift, water usage & chemical runoff). Wind watch - direction and strength monitored throughout spray operation. Spray using optimum methodology to suit wind direction wherever possible. As necessary - have an observer on the boundary to verify actual drift.	2	2	4	Reduce / Acceptable	D.Hall
9	Fatigue - risk due to pilot judgement being impaired due to being overtired or otherwise fatigued. Heat and PPE can lead to a more rapid onset of fatigue and pressure to "carry on" can lead to over tiredness and fatigue.	Fatigue	Pilot, Ground personnel and client.	3	3	9	Fatigue prevention procedures in place to ensure adequate rest periods and days off. Flight times recorded and monitored. Pilots fly in accordance with IMSAFE protocol at all times. Personnel to monitor each other for fatigue. If feeling tired, the pilot has authority to end the operation.	2	2	4	Reduce / Acceptable	D.Hall

10	Risk associated with the site of the operation. Proximity to wires, terrain tall trees / objects / buildings etc. Heighten risk of RPAS striking objects.	RPAS collision	Pilot, Ground personnel and client.	4	3	12	Specific safety plan required for all operations - includes a safety briefing to identify local hazards and agreement on mitigations prior to commencing the operation. Site evaluation of local hazards is mandatory. Notification to neighbours for all spray operations. Special permissions to be obtained as required. Third party risk to be identified and minimised. Site to be protected and/or patrolled as necessary. Appropriated insurance cover to be in place. Pilot authorised to call off the operation at any time for safety reasons.	2	2	4	Isolate / Acceptable	D.Hall
11	Public interference / interaction - Increased risk due to ground staff/ personnel being distracted during loading and / or the flight operation.	Ground crew Distraction	All personnel and Equipment	3	3	9	Staff / personnel not to use personal cell phones or other devices not required for operations that can distract them during flight operations. Personnel encouraged to monitor each other. Personnel to watch out for each other. Personnel authorised to cease work if impaired or others pose a safety risk to.	2	2	4	Reduce / Acceptable	D.Hall
12	Lifting heavy items - personal injury due to overreaching, twisting, or incorrect techniques while lifting heavy objects.	Strains	Company personnel	3	3	9	Staff/ personnel to use correct lifting techniques. Staff/ personnel not to lift heavy objects on their own.	1	1	1	Reduce / Acceptable	D.Hall
13	On site - Possible loss of facilities, RPAS and injury from burns and smoke inhalation.	Fire	Company personnel, client, public	4	3	12	Heightened level of awareness amongst personnel in high risk areas. Evacuation procedures in place. Availability of fire extinguishers. Emergency services if required.	4	2	8	Tolerable	D.Hall
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Risk Scoring Key	Severity		Likelihood	
	Fatality	5	Certain or imminent	5
Major injury, disabling illness, major damage	4	Very likely	4	
Lost time injury, illness, damage	3	May happen	3	
Minor injury, minor damage	2	Unlikely	2	
Delay only	1	Very unlikely	1	

Risk Rating Categories	Score Range	Category	Action
	10 to 25	Unacceptable	Do not proceed; seek immediate guidance from the safety team
	6 to 9	Tolerable	Proceed with caution but seek to reduce risk further if possible
	1 to 5	Acceptable	Proceed

Order of Control Measures	Effectiveness	Control Measure	Description
	Most effective	Eliminate	Ask yourself if the activity needs to be carried out
	Substitute	Ask yourself if the same effect can be achieved with something less risky	
	Reduce	Ask yourself if you can use less of something, or limit the time etc	
	Isolate	Make sure that the risk is contained to the smallest possible area	
	Enclose	Make sure that no-one can get to the hazard	
	Other Engineering Controls	Emergency stop buttons, automated controls etc	
	Safe System of Work	Carry out the work according to a specific step by step programme with training	
	Training/Communication	Safety team can advise	
	PPE	Use of ear defenders, gloves, hard hat, floatation device.	
Least effective	Discipline and Enforcement	Telling people to be careful	