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PRIMARY INDUSTRIES

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Procedure – Aerial Control of Plague Locusts

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Table of Contents

1.	<i>Application / Scope</i>	2
2.	<i>Abbreviations / Definitions</i>	2
3.	<i>Resources / Equipment</i>	3
4.	<i>Warnings</i>	3
5.	<i>Procedure</i>	3
5.1	Regulations and responsibilities	3
5.2	Hazard, Incident and Accident Reporting	4
5.3	Risk Management / Aviation Hazard Management	4
5.4	Flight Duty Limits and Fatigue Management	5
5.5	Flight Following	5
5.6	Search and Rescue	6
5.7	Personnel on Aircraft	6
5.8	Aircraft Deployment and Administration	6
5.9	Aviation Briefings	7
5.10	Aircraft Tasking.....	7
5.10.1	Aerial Surveillance	8
5.10.2	Aerial Spotting Operations	8
5.10.3	Agricultural Operations with Spotter Aircraft.....	8
5.10.4	Agricultural Operations without Spotter Aircraft.....	8
5.11	Airbase Management and Coordination	8
5.11.1	Refuelling and Loading	9
5.11.2	Airspace Management.....	9
5.11.3	Selection of Landing Sites	9
5.11.4	Communications	10
5.12	Identifying Targets	10
5.13	Criteria for Prioritising Targets	11
5.14	Aerial Spraying of Targets	12
5.15	Permission to Spray.....	12
5.16	Approval to Spray Without Permission	13
5.17	Post Control Check.....	13
6.	<i>References</i>	13
7.	<i>Appendices</i>	14

1. Application / Scope

This procedure is issued with the concurrence of the Director-General of Industry & Investment NSW (I&I NSW) under Clause 6.2 of the Memorandum of Understanding between the Director-General of I&I NSW and State Management Council of the Livestock Health and Pest Authorities (LHPAs).

Air operators (including pilots and crewpersons), personnel of I&I NSW, LHPAs and other Government agencies are required to manage and operate aircraft for the control of locusts in a safe, efficient and cost-effective manner.

2. Abbreviations / Definitions

ALG	Air Landing Ground
AOC	Air Operating Certificate
ASA	Air Services Australia
ATSB	Australian Transport Safety Bureau
AusSAR	Australian Search and Rescue
CASA	Civil Aviation Safety Authority Australia
COB	Close of business
DECCW	Department of Environment, Climate Change and Water
I&I NSW	Industry & Investment NSW (formerly NSW Department of Primary Industries)

HLS	Helicopter Landing Site
LCC	Local Coordination Centre
LHPA	Livestock Health and Pest Authority
NOTAMS	Notice(s) to airmen
OH&S	Occupational health and safety
PPE	Personal protective equipment
SAR	Search and Rescue
SCC	State Coordination Centre
SOP	Standard operating procedure
UHF	Ultra-high frequency
VFR	Visual flight rating
VHF	Very high frequency

3. Resources / Equipment

- For nymph and swarm spraying, suitable aircraft are available from I&I NSW approved companies. These companies are contracted to supply aircraft fitted out with appropriate equipment. The spray companies supply their own fuel.
- Aircraft and aerial operators must meet current specifications as determined and documented in the contract.
- Photo identification cards for approved and contracted aircraft and pilots and authorised observers

4. Warnings

- All passengers, aircrew and operators involved in aircraft operations will wear PPE according to the relevant task profile:
 - Agricultural Operations with Spotter Aircraft
 - Agricultural Operations without Spotter Aircraft
 - Aerial Surveillance (not below 500ft)
 - Aerial Spotting (not below 200ft)
- All operations must be in accordance with:
 - relevant legislation including the Civil Aviation Act and the Occupational Health & Safety Act;
 - any practices set out in any workplace safety documents produced by WorkCover NSW and Department of Environment, Climate Change and Water (DECCW), and
 - Operations Manuals.
- Only trained, competent and authorised personnel are permitted to work around aircraft and be crew in aircraft and will be identified with a photo identification stating their role

5. Procedure

5.1 Regulations and responsibilities

Air operators are responsible for determining whether they should seek specialist advice and assistance in managing their air operations including risk management processes, based on their individual circumstances.

To the extent of any inconsistency, the following take precedence over these SOPs where the standard is higher insofar as they relate to the management and use of aircraft and the provision of related services:

- any statutory requirements or other requirements under the laws of Australia (including, without limitation, Civil Aviation and OH&S legislation);
- any Codes of Practice or related industry standards or guidelines;

- any guidelines or policies issued by Government or regulatory authorities;
- air operators' Operations Manuals;
- any manufacturer's recommendations.

Air operators are asked to notify I&I NSW immediately of any inconsistencies they are aware of between these SOPs and the above requirements, codes, guidelines and recommendations.

The carriage of dangerous goods on aircraft, including additional fuel supplies, will only be permitted in accordance with Civil Aviation Safety Regulation – Dangerous goods, part 92.040. Relevant DECCW and WorkCover NSW requirements relating to fuel and pesticides handling also need to be complied with.

Airbase operators and mixing/loading and refuelling crews must wear appropriate PPE as specified by the Civil Aviation Safety Authority Australia (CASA) or WorkCover NSW, including, as a minimum, long trousers and long-sleeve shirts in a non-synthetic material, boots or fully enclosed footwear, ear protection (muffs, plugs), hats, eye protection (eg. goggles, tinted safety glasses), chemical gloves and safety vests.

5.2 Hazard, Incident and Accident Reporting

Any personnel (flight crew, the aircraft owner, the operator, the hirer, aircraft crew and the ground crew) involved in or becoming aware of a hazard, accident or incident must notify the Local Controller immediately and complete reports to the ATSB (as below). The Local Controller is to immediately notify the State Coordination Centre. The SCC will keep the I&I NSW OHS Unit informed including copies of reports of major incidents and all injury report forms according to the NSW DPI Workplace Incident Management procedure.

Any [immediately reportable](#) or [routine reportable](#) matters as defined by the Transport Safety Investigation Regulations 2003 must be reported to the ATSB:

- using the accident/serious incident hotline, 1800 011 034
- followed by a written report within 72 hours using the [online notification form](#) or the [ATSB Aviation Accident or Incident Notification form](#)

A copy of the ATSB report must be forwarded to State Coordination Centre. Hazards and potential risks in aerial control must be reported as soon as they are identified and communicated to the whole operation.

When an accident occurs, the aircraft and anything in the aircraft is deemed to come into the custody of the Director of ATSB and it must not be removed or interfered with. The removal of persons, animals or mail is permissible (Air Navigation Act 1920 - Part 2A (Division 7)).

Rescuers are permitted to take such action as is necessary to protect the wreckage from further damage and to prevent danger to aircraft, to other transport and to the public.

Goods and baggage may only be removed from the wreckage under the supervision of the police or another authorised officer.

Notify DECCW about incidents involving transport of dangerous goods and WorkCover NSW regarding other incidents with dangerous goods.

5.3 Risk Management / Aviation Hazard Management

A risk assessment process (refer to the NSW DPI risk management policy, OHS risk management [policy](#) and [NSW DPI risk management framework implementation procedure](#)) is required to be conducted by competent personnel using the task risk assessment template or similar for all tasks involving aircraft. Risk assessments should be reviewed when conditions change, such as:

- moving operations into an operating area that has significantly different characteristics from those recently encountered in other operating areas;
- changing tasks and/or operating procedures;
- deployment to a new operating base;
- substantial changes in crew or support personnel;
- significant adverse weather;
- introduction of new equipment or types of equipment;
- identification of new hazards;
- a major incident occurring;
- indications from incident trend analysis.

If the level of risk remains unacceptable better treatment options should be considered or, if these cannot be identified, refer the matter to someone higher in the management chain.

5.4 Flight Duty Limits and Fatigue Management

- Operators and pilots of contracted aircraft are responsible for the maintenance of flight and duty times in accordance with CASA regulations and must ensure that these flight and duty times are not exceeded.
- Pilots or operators must advise the LCC when limitations are likely to affect control operations. LCCs should liaise with the SCC regarding replacement aircraft and other management alternatives.
- Operators should also provide feedback to I&I NSW to ensure arrangements facilitate fatigue management.
- I&I NSW and LHPA personnel involved in aviation operations are to follow fatigue risk management principles.

5.5 Flight Following

Flight Following is a procedure whereby a competent person keeps track of the progress of a flight through contact at 30 minute time intervals (according to the task profiles), and initiates Search and Rescue (SAR) action if contact is not maintained or if there is some doubt as to the safety of the aircraft. A 'competent person' is someone who is trained and assessed as competent to take responsibility for Flight Following and SAR arrangements.

- a) Flight Following should involve scheduled reporting at 30 minute intervals to a competent person. The call period may be adjusted to suit specific operational conditions, but cannot exceed 1 hour.
- b) Reporting and recording (see Flight Following responsibilities below) can be undertaken by the LCC/FCP or air operator's ground crew, depending on local conditions. A flight following log must be maintained.
- c) Reporting should ideally be done using airband or UHF radio.
- d) Where radio communications are not possible, mobile or satellite phones may be utilised.

Flight Following responsibilities – use SAR Aircraft Information form

- Record callsigns.
- Monitor Flight Following calls.
- Record time of call, location and intentions of pilot.
- Record expected time of next call.
- When there is a change of passengers, record name changes on Passenger Manifest and Briefing for Aircraft form.
- Record changes to tasking or of area of operations.
- Record time of arrival at final destination.
- Initiate Search and Rescue (SAR) action if required.

Pilot or aircrew responsibilities:

- Report departure and report location every 30 minutes thereafter to a competent person.
- Report changes to passenger list (names).
- Report changes to tasking.
- Report change of area of operations.
- Report arrival at destination.

5.6 Search and Rescue**a) If an aircraft becomes overdue:**

- Attempt to contact the aircraft
 - on agreed channel;
 - via ground personnel at last known location;
 - via other tasked aircraft;
- Continue to try at regular intervals;
- Arrange for Air Services Australia (ASA) to call the aircraft - Contact ASA on 1800 805 150;
- Consider if aircraft has diverted and not advised.

b) If there is still no contact with the aircraft after 30 minutes:

- Notify Air Services Australia on 1800 805 150;
- Mobilise available resources that may be required;
- Consider the use of locally tasked aircraft to conduct a search;
- Notify local police and other emergency services;
- Contact Australian Search and Rescue (AusSAR) on 1800 815 257;
- Notify State Coordination Centre

5.7 Personnel on Aircraft

- a) Personnel on aircraft consist of the pilot and trained observers as outlined in the relevant task profile.
- b) Non authorised passengers are NOT permitted to travel in locust control tasked aircraft. Only essential personnel are to travel in locust control tasked aircraft.
- c) All aircraft passengers are to be listed on a Passenger Manifest and Briefing for Aircraft form - a copy of which is to be left with a competent person on the ground.

5.8 Aircraft Deployment and Administration

- a) Aircraft contactors and aircraft will be assigned by the State Coordination Centre (SCC) at Orange to a Local Coordination Centre (LCC). Aircraft will be managed within that region by the LCC. Additional aircraft can be requested by the region from SCC.
- b) Only I&I NSW contracted operators, aircraft and pilots are to be used for locust control operations. The list of approved contracted operators, aircraft and pilots for specific tasks (eg. surveillance, spotting and spraying) will be maintained by the SCC.
- c) LCCs are to request aircraft from the SCC using Task Request Forms. LCCs are required to forecast aircraft requirements in advance.
- d) Task request number will be used to track aircraft jobs from request to invoicing.
- e) Aircraft task details will be communicated by the LCC/FCP to the aircraft crew during briefing (using the Air operations brief form) prior to tasking/operations using an Aircraft Task Operations Plan - Surveillance or Aircraft Task Operations Plan – Spraying form.
- f) Passenger Manifest and Briefing for Aircraft form must be completed by the LCC/FCP prior to tasking/operations and must be updated throughout the day.
- g) Locust Spray Record – Aerial Control form must be completed by the agricultural operator and submitted to the LCC on completion of spray tasks daily. The agricultural operator provides a copy of the spray record to the owner/occupier of the land sprayed.
- h) Flight Operations Return forms including Task Numbers are to be submitted by FCP to the LCC daily.

- i) Aerial Control Log including Task Numbers and spray information for each tasking are also to be submitted by the FCP to the LCC daily.
- j) Air operations personnel must be debriefed at the end of a flight or day, using the Air operations debrief form.

5.9 Aviation Briefings

Comprehensive briefings involving all operational personnel are a vital component, given the complexity and risks associated with locust control operations.

- a) Daily general briefings should involve pilots and operational personnel. Task-specific briefings (Air operations brief form) should also be undertaken, either following general briefings or prior to tasks. Briefings should be based on the Aircraft Task Operations Plan and include:
 - daily objectives
 - control activity
 - weather
 - aircraft and tasking
 - refuelling and loading
 - communications and flight following
 - low-level operations
 - NOTAMS (Notice to Airmen)
 - risk and safety issues including incidents, trends and specific safety hazards relevant to the period and area of operations
 - administration, including flight and duty times and maintenance issues
- b) Weather information should be made available by the Air Operations Coordinator; however, operators are ultimately responsible for ensuring that they possess appropriate weather information. Crew need to be aware that extended areas of operation may involve significant local weather influences.
- c) Briefings need to specifically emphasise the risks associated with low flying level operations and the importance of hazard identification and assessment, cockpit communication and discipline.

A sterile cockpit environment (e.g. no non-essential communication or movement within the aircraft) is required according to task profiles. This requires the application of rigorous crew resource management techniques including, but not limited to:

- the elimination of extraneous communication;
 - the verbalisation and read-back of hazards;
 - the verbalisation of intentions; and
 - the questioning of actions that are not consistent with safety or with previously verbalised intentions
- d) All personnel are to receive a safety/emergency briefing from the pilot prior to any flight, specific to the type of aircraft in which they will be flying. The briefing should include points as detailed in the Passenger Manifest and Briefing for Aircraft form. The pilot, crew and passengers must complete this form prior to departure.

5.10 Aircraft Tasking

Aircraft tasking needs to be included in briefings. The type of operation (survey, spotting etc.) must be clearly identified for each component of operations. Tasking forms also need to be completed for each operation and be considered in task-specific briefings by aircrew. The Aircraft Task Operations Plan – Surveillance or Aircraft Task Operations Plan – Spraying form must be completed.

5.10.1 Aerial Surveillance

The objective of the Aerial Surveillance task is to determine the extent of locust activity in general terms.

The Aerial Surveillance task profile describes the task and the related sequence of task activities, limitations, PPE and crew requirements, and other general information.

5.10.2 Aerial Spotting Operations

The objectives of the Aerial Spotting task are:

- To determine the extent of locust activity including accurate geographic boundaries, location and density to inform agricultural operations (aerial spraying) with the aim of optimising the outcome of those agricultural operations.
- Identify environmentally sensitive areas and inform agricultural operations to minimise any risk to these areas.
- Identify aviation hazards and communicate these to the agricultural operator to augment information from the inspection component of aerial agricultural operations with the aim of reducing safety risk.

The Aerial Spotting task profile describes the task and related sequence of task activities, limitations, PPE, crew requirements and other general information.

5.10.3 Agricultural Operations with Spotter Aircraft

The objective of agricultural operations is to control locusts through the delivery of approved insecticides in areas that may not be familiar to the operator.

The Agricultural Operations with Spotter Aircraft task profile describes the task in general terms, noting that it is expected that agricultural operators shall comply with their industry standards and guidelines.

5.10.4 Agricultural Operations without Spotter Aircraft

The objective of agricultural operations is to control locusts through the delivery of approved insecticides.

The Agricultural Operation without Spotting Aircraft task profile describes the task in general terms, noting that it is expected that agricultural operators shall comply with their industry standards and guidelines.

5.11 Airbase Management and Coordination

The management of airbases and the coordination of aircraft operations play a pivotal role in the safe and efficient use of aircraft.

- a) It is recommended that LCCs with operations of aircraft appoint a dedicated Aircraft Operations Manager. The Aircraft Operations Manager needs to have experience in aircraft operations. Role responsibilities are listed in Role Descriptions – Local Operations Section.
- b) Aircraft Operation Managers may work from either the LCC or FCP or a forward airbase, depending on the nature of operations. Aircraft Operation Managers are ground based and are not to fly.
- c) Airbase selection and establishment is an important factor in maintaining safety and operational efficiency. Issues to consider include:

- infrastructure
- water supply, insecticide storage and loading
- aircraft hazards
- access
- fire extinguishers
- wind indicators
- communications
- security

d) The Air Operations Manager in consultation with the pilot should undertake hazard identification and risk assessment for any potential airbase locations. Airbases and flight paths need to be located well clear of any power lines and other hazards.

5.11.1 Refuelling and Loading

Aircraft operators are responsible for:

- a) Supply of aircraft fuel, refuelling personnel and associated PPE
- b) Mixing crews and loaders, equipment and associated PPE
- c) All safety and fire precautions detailed in the operator's Air Operations Manual, including fire-fighting equipment, and bunding for fuel and earthing procedures for the aircraft
- d) Safety of personnel around aircraft – all authorised passengers (observers) and uninvolved aircrew are to move a minimum 15 metres clear of aircraft during refuelling and loading operations.
- e) Hot refuelling of turbine-powered helicopters with Jet A1 - permitted in accordance with approved flight manuals.
- f) Hot refuelling of AVGAS-powered aircraft **is not permitted**.
- g) Safe handling of pesticide in accordance with relevant DECCW and WorkCover NSW requirements.

5.11.2 Airspace Management

Multiple aircraft operations need to be closely monitored to ensure safety is maintained:

- a) Pilots will be responsible for maintaining separation between aircraft.
- b) A common radio frequency needs to be allocated to aircraft working in close proximity to ensure communications are maintained.
- c) Aircraft involved in spraying operations may be supported by a spotter helicopter to assist in hazard identification and the effective conduct of the task.
- d) All spotter aircraft flights will have appropriately trained and competent observers on board that have been approved by the SCC.

5.11.3 Selection of Landing Sites

Selection of landing sites is specified in the task profiles.

Minimum standards are required in the selection of Helicopter Landing Sites (HLSs) to enhance safety. These procedures are **not** exhaustive.

- a) Use established landing grounds or known safe areas. HLSs are to meet, as a minimum, the requirements documented in Civil Aviation Advisory Publication (CAAP) 92-2(1). Additional restrictions may be placed from time to time by Local Controllers or other stakeholders.
- b) CAAP 92-2(1) defines a basic HLS as a place that may be used as an aerodrome for infrequent opportunity and on a short-term basis for all operations by day and under helicopter visual flight rating (VFR). The use of the CAAP guidance, especially in relation to a basic HLS

is, however, subject to the acceptance by the pilot of the requirement to exercise sound airmanship. Further, it is inappropriate to use the minimum basic HLS criteria at operating bases from which operations are intended to be conducted on a repetitive basis for more than a day.

- c) In circumstances where the basic HLS criteria could be applied in accordance with CAAP 92-2(1), it is expected that Pilots in Command will allow an appropriate safety margin in addition to the criteria for non-emergency situations.

5.11.4 Communications

- VHF airband frequencies are allocated to the I&I NSW for use during the locust campaigns
- VHF airband base radios will be allocated to LCC/FCP as required
- Frequencies will be allocated to LCC/FCPs for exclusive use and should be used for Flight Following, SAR and tasking purposes.
- Use of government and non-government communication networks, eg. RFS, GRN, etc, may be authorised.

5.12 Identifying Targets

Adult swarms are the primary target for aerial control.

Swarm targets may be identified by either ground or aerial surveillance. Fixed wing aerial spraying will only be considered when the swarm meets the following criteria:

- At least 100 hectares in total area and be medium (11-50 per square metre) to high (greater than 50 per square metre) density. However, 3 x 35 ha targets or similar that combined will make up 100 hectares of target may be considered as long as each of the smaller targets are adjacent or in very close proximity.

Nymph bands may be considered for aerial spraying as a last resort providing all other attempts for ground control have been exhausted. All requests for fixed wing air spraying of bands need to be approved by the Operations Manager at the LCC (for FCPs) or the Operations Manager at SCC (for LHPAs not covered by the LCC).

Where aerial surveillance identifies significant swarm targets they should record location (GPS), size and identify any hazards. Details should be radioed to air operations at the LCC. A Plague Locust Report form must also be completed.

Once an adult swarm notification/report is received the FCP/LHPA will undertake a historical search of previous reports/documents and coordinate an on-ground assessment. This search should include previous permission to spray forms from reporting landholders or neighbours. As the situation may have changed since permission was given the owner/occupier of land is required to be contacted prior to spraying. (See Section 5.15)

Reports of swarm activity must be validated in the first instance by ground surveillance to confirm the presence of the swarm. The location of swarms should then be accurately recorded using Lat/Long (GPS preferred in degrees decimal minutes) and a Plague Locust Report Form completed (as for bands). Ensure the swarm size and density is marked on the report form.

Field personnel will then need to determine whether:

- the swarm meets the target criteria (area and density),
- the swarm is able to be aerially sprayed (risk assessment for hazards).

Importantly, a risk assessment of the target area MUST be conducted and should include the identification of any sensitive areas, apiary sites, organic farms, aviation safety hazards that may affect the aerial operation e.g. powerlines, redundant telephone wires etc. The

minimum buffer should be assessed on a case-by-case basis, be in accordance with the insecticide label and procedures *Environmental Considerations in a Locust Control Response* and *Insecticide Management for Plague Locust*. Permission to spray MUST (see section 5.16) be obtained from the owner or occupier of land and recorded on the landholder consultation record prior to any spraying. The owner or occupier of the land must be advised of the day of spraying.

Where possible ground control should be ruled out before aerial spraying is considered. Ground spraying of roosting adults should be conducted preferably in late afternoon or early morning to reduce the need for aircraft. This can be applied in situations where the swarm does not meet the target size criteria but meets target density criteria.

The Plague Locust Report form, Landholder Consultation Record with permission to spray, details of risk assessment and further recommended action must then be forwarded by the FCP to the LCC for approval or forwarded to the SCC by LHPA's not covered by an LCC.

The LCC/SCC will assess the application and determine if there is any additional information required. If further information is required a surveillance aircraft MAY be tasked to validate location and target size of swarm, if it had not previously done so. If deployed, the surveillance aircraft, operating under the surveillance task profile, must confirm the target and any additional risk assessment information identified to the LCC/SCC immediately. Aerial spotting is permitted to clarify swarm targets provided the transition from surveillance (task profile) is pre-planned, approved and the Task profile – Aerial spotting requirements are addressed.

The LCC/SCC will ensure the Risk Assessment is validated through Front Gate to confirm all sensitive areas or previous insecticide application has been appropriately identified.

Once the LCC/SCC is satisfied with the request to aeri ally spray the swarm, a task request for the job will be completed.

If the LCC/SCC is not satisfied with the request then implementation of ground control or no action may be recommended.

5.13 Criteria for Prioritising Targets

In the likely event that simultaneous swarms develop, there may be a necessity to prioritise swarm treatment. Factors to consider during the Risk Assessment include:

- a) The size and density of the swarm (the greater the size and density, the greater potential for crop/pasture damage and egg laying potential). Swarms must meet the minimum target criteria size and density.
- b) Economic loss to landholders – the potential for damage to crops, pasture and other agricultural enterprises (locusts will target these as a feed source in order to build fat reserves for migration or egg-laying).
- c) The biological state of the locusts.
 - Field personnel should assess locust status by catching insects and dissecting them and checking for fat or egg reserves. Adults full of eggs/fat (yellow in colour) pose the threat of laying (further generations) or migration to other areas.
 - Fattened locusts looking to lay will generally fly during the heat of the day (10am – 4pm) at heights up to 300m (too high for control). There may be opportunities to control these in the cool of the day (morning and evening) when roosting.
 - Locusts with no fat generally fly low during the heat of the day seeking feed and may be potential targets.

- d) The height of the swarm. Once swarms are above 10 metres in height they will become difficult to spray. Label requirements for aerial control must be adhered to. As the height increases so does the potential for spray drift.
- e) The presence of environmental hazards including: threatened species, complex ecosystems (as opposed to monocultures), forage range of bees, organic farm and waterbodies restrict the ability to aerial spray.
- f) Access to target. Be mindful of the terrain and hazards such as telephone lines, urban areas, powerlines, bird strike etc. The aircraft pilot will have the final say on the ability to spray a target.
- g) Controlling a swarm before it moves to an area where control will not be feasible. Weather conditions will assist in making this decision.
- h) Controlling a swarm before it moves to an area not previously infested. Weather conditions will assist in making this decision.
- i) Potential to impact on urban areas (public parks, bowling greens, schools, golf courses, gardens etc) that will generate a public reaction.
- j) Aircraft operators' considerations.

5.14 Aerial Spraying of Targets

The FCP will forward a Task Request Form to the LCC requesting the use of fixed wing spray aircraft. LCC will make the final determination as to whether a target will be aerially sprayed. Prior to instigating the aerial spraying, it **MUST** be validated that the owner/occupier of the land has given permission to spray, and that a Risk Assessment and Landholder Consultation Record form recording permission to spray has been completed (see Section 5.15).

Prior to commencing the spray operation the pilot must be fully briefed on the task (see Section 5.9). Additionally this will include:

- o GPS coordinates of the target;
- o identification of all sensitive areas;
- o weather conditions expected at time of spraying (including wind speed and direction); and
- o any information on hazards within the target site, such as power or telephone lines, survey aircraft, flocks of ibis on feeding sites, organic farms, water-bodies etc. Pilots must be informed of all known hazards even if it is thought that the pilot has seen the hazard.

Note: If targets are not visible from the air the target can be identified to the spray pilot by physical markers such as fence lines or other geographical features or by GPS waypoints.

Under the *Pesticides Act 1999* the aerial applicator has the responsibility to supply owners/occupiers of the properties on which targets have been sprayed with a copy of the spray application record (see Locust Spray Record – Aerial Control form).

The aerial applicator must also supply the Aircraft Operations Manager within three days with a copy of the spray application record of the properties on which targets have been sprayed.

The Aircraft Operations Manager must send completed Aerial Control Log and Flight Operations Return forms to the LCC on a daily basis. LCC are to ensure SCC Mapping have a copy.

Personnel at the FCP/LCC must cross reference the spray/air log supplied by air applicator with the original GPS coordinates (from Plague Locust Report form) to confirm the designated target was sprayed.

5.15 Permission to Spray

I&I NSW and LHPA supervised aerial application of locust insecticides generally cannot be undertaken on a property without prior consultation with, and the permission of, the owner or occupier of the land. The withholding requirements of the insecticide to be used must be explained to the owner/occupier, who must also be provided with written information about the insecticide.

It is strongly advised that all efforts be made to get the owner/occupier to sign the Landholder Consultation Record. If only a verbal permission can be obtained, this must be documented on the form and/or in a diary.

It is very important to ensure permission is gained as there can be instances where legal action may be taken and proof of permission will be required in court.

A copy of the label, permit and MSDS of the insecticide to be used should also be given to the landholder prior to the property being sprayed.

Landholder Consultation Record can be completed some time before spraying is actually carried out. Forms should be completed from all owner/occupiers in an area which may need to be sprayed at a later date. The form will indicate the dates for which it is current and applicable.

If spraying is carried out the landholders will be issued with:

- copies of the label of the insecticide to be used on their properties;
- any appropriate off-label permits for the insecticide used on their property;
- the appropriate MSDS for the insecticide;
- the [Australian Plague Locust, Landholder Control Strategies for NSW](#) brochure;
- the revised Safemeat brochures [Plague locusts, wingless grasshoppers and livestock residues](#) and where appropriate the supplementary advice; and
- a copy of the spray record.

The owner/occupier must then be verbally contacted immediately prior to spraying being undertaken, i.e., on the day the spraying will occur, to advise of spraying and to check that conditions affecting the prior approval to spray and risk assessment have not changed, eg. withholding period issues.

If the landholder is away from the property, rangers should obtain a contact phone number so that the landholder can be contacted on the day of the spraying to inform him/her the spraying will occur that day.

5.16 Approval to Spray Without Permission

In situations where the occupier of the land cannot be found or refuses to give approval to enter, survey and/or carry out treatment for the control plague locusts, refer to Section 5.8 of the [Surveillance for plague locust](#) procedure.

5.17 Post Control Check

Rangers and/or surveillance officers should check the effectiveness of the spraying approximately 72 hours after the target area is sprayed. At this stage, mortality should be evident (except Metarhizium). Refer to the procedure – [Surveillance of plague locusts](#) – section 5.7.3

6. References

Policy

- A-070 Aircraft operations policy
- A-038 OHS risk management policy
- [Environmental Considerations in a Locust Control Response](#)
- G-001 NSW DPI risk management policy
- Plague Locust Compliance and Enforcement

Procedures

- Aircraft Operation Standard Operating Procedures (2008/020)

- [Environmental Considerations in a Locust Control Response](#)
- [Insecticide Management for Plague Locusts](#)
- NSW DPI risk management framework implementation procedure
- NSW DPI Workplace Incident Management
- [Role Descriptions – Local Operations Section](#)
- [Surveillance of plague locusts](#)

Forms

- [Aerial Control Log](#)
- Air operations brief
- Air operations debrief
- Aircraft Task Operations Plan – Spraying
- Aircraft Task Operations Plan – Surveillance
- [ATSB Aviation Accident or Incident Notification form](#)
- [Flight Operations Return](#)
- [Incident Report Form](#)
- [Landholder Consultation Record](#)
- [Locust Spray Record – Aerial Control form](#)
- NSW DPI Injury Notification Form
- [Passenger Manifest and Briefing for Aircraft form](#)
- Plague Locust report form
- [Post Control Check](#)
- [SAR - Aircraft Information form](#)
- [Task Request Form](#)
- [Task risk assessment template](#)

Task Profiles

- [Aerial Spotting \(not below 200ft\)](#)
- [Aerial Surveillance \(not below 500ft\)](#)
- [Agricultural Operations with Spotter Aircraft](#)
- [Agricultural Operations without Spotter Aircraft](#)

Legislative Acts and Regulations

- [Air Navigation Act 1920](#)
- [Civil Aviation Act, 1988](#)
- [Civil Aviation Advisory Publication \(CAAP\) 92-2\(1\)](#)
- [Civil Aviation Safety Regulations](#)
- [Occupational Health and Safety Act, 2000](#)
- [Pesticides Act, 1999](#)
- [Rural Lands Protection Act, 1998](#)
- [Transport Safety Investigation Regulations 2003](#)

Information

- [Australian Plague Locust, Landholder Control Strategies for NSW](#)
- [Australian Transport Safety Bureau](#)
- [Plague locusts, wingless grasshoppers and livestock residues](#)

7. Appendices

Nil