



DIPPING WITH DIMETHOATE OR FENTHION

REVISION REGISTER

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1. PURPOSE

The purpose of this procedure is to describe -

- (a) the principles of operation, design features and standards required for dipping equipment; and
- (b) the responsibilities and actions of personnel;

that apply to dipping produce with dimethoate or fenthion for fruit fly under an Interstate Certification Assurance (ICA) arrangement.

2. SCOPE

This procedure covers all certification of dipping with dimethoate and fenthion by a business operating under an Interstate Certification Assurance arrangement in the Northern Territory.

Dipping with dimethoate may be used for all fruits (excluding all edible skin species and mandarins that have received pre-harvest treatment with dimethoate), tropical and sub-tropical fruit inedible peel include (avocado, banana, bread fruit, custard apple, durians, feijoa, guava, jack fruit, kiwi fruit, lychee, longan, mango, mangosteen, melons, papwpaw, passionfruit, tamarillo, pineapple, rambutan, sapodilla, sapote, tamarind and watermelon).

IMPORTANT

Suspension of dimethoate.

The Australian Pesticides and Veterinary Medicines Authority (APVMA) has suspended certain use patterns for dimethoate. Dipping of some host fruits previously eligible for treatment are no longer permitted. Check the APVMA website at www.apvma.gov.au for further details.

Dipping with fenthion may be used for tropical and sub-tropical fruit with inedible peel and melons (including watermelon).

Dipping in dimethoate or fenthion may not be an accepted quarantine entry condition for all fruits to all intrastate or interstate markets.

Some intrastate or interstate markets may require additional quarantine certification as a condition of entry. It is the responsibility of the business consigning the produce to ensure compliance with all applicable quarantine requirements.

Information on intrastate and interstate quarantine requirements can be obtained from Northern Territory Quarantine.



3. REFERENCES

WI-02	Guidelines for Completion of Plant Health Assurance Certificates.
APVMA Permit No. PER13158	Permit to Allow Minor Use of an AgVet Chemical Product for Postharvest Treatment of Specified Citrus and Tropical Fruit to Control Various Fruit Fly Species. 24 September 2013 to 5 October 2014.
APVMA Permit No. PER13170	Permit to Allow Minor Use of an AgVet Chemical Product for Postharvest Treatment of Melons, Including Water Melon to Control Pests of Quarantine Concern. 24 September 2013 to 5 October 2014.
APVMA Permit No. PER13841	Permit to Allow Possession, Supply and Use of the Suspended Agricultural Chemical Product Lebatcid Insecticide Spray Containing Fenthion in SA, VIC, TAS, NSW, ACT, QLD and NT. 31 October 2012 to 30 October 2014.

4. DEFINITIONS

Accredit	means to authorise nominated staff within a business to issue Assurance Certificates.
Act	means the <i>Plant Health Act</i> .
Application for Accreditation	means an Application for Accreditation of a business for an Interstate Certification Assurance (ICA) and/or Certification Assurance (CA) arrangement (Attachment 1).
Approved Laboratory	means a laboratory approved by the National Association of Testing Authorities (NATA) or the Northern Territory Department of Primary Industry and Fisheries.
Assurance Certificate APVMA	means a Plant Health Assurance Certificate (Attachment 2).
Authorised Signatory	means the Australian Pesticides and Veterinary Medicines Authority.
Business	means a person whose name and specimen signature is included as an Authorised Signatory on the business's approved Application for Accreditation form.
Capsicum	means the legal entity responsible for the operation of the dipping facility and ICA arrangement detailed on the business's Application for Accreditation.
Certification Assurance	means the large bell-pepper forms of <i>Capsicum annuum</i> .
Certified/Certification	means a voluntary arrangement between the Department of Primary Industry and Fisheries and a business that demonstrates effective in-house quality management and provides assurance through documented procedures and records that produce meets specified requirements.
Dipping	means covered by a valid Plant Health Assurance Certificate (Attachment 2).
Dipping	means full immersion in a diluted chemical mixture.

Facility	means the location of the dipping operation covered by the Interstate Certification Assurance arrangement.
Fruit fly	means Queensland fruit fly (<i>Bactrocera tryoni</i>), Lesser Queensland fruit fly (<i>Bactrocera neohumeralis</i>) and Northern Territory fruit fly (<i>Bactrocera aquilonis</i>).
ICA	means Interstate Certification Assurance.
Inspector	means an inspector appointed under the <i>Plant Health Act</i> .
Interstate Certification Assurance	means a system of Certification Assurance developed to meet the requirements of State and Territory governments for the certification of produce for interstate and intrastate quarantine purposes.
NTQ	means Northern Territory Quarantine.

5. RESPONSIBILITY

These position titles have been used to reflect the responsibilities of staff under the ICA arrangement. These positions may not be present in all businesses, or different titles may be used for staff who carry out these responsibilities. In some businesses one person may carry out the responsibilities of more than one position.

The **Certification Controller** is responsible for -

- ensuring the business has current accreditation for an ICA arrangement under this Operational Procedure and maintains a copy of the current application form for audit purposes;
- representing the business during audits and other matters relevant to ICA accreditation;
- training staff in their duties and responsibilities under this Operational Procedure;
- ensuring the business and its staff comply with their responsibilities and duties under this Operational Procedure;
- ensuring that all dimethoate or fenthion dipping certified under the business's ICA arrangement is carried out in accordance with this Operational Procedure.

The **Treatment Operator** is responsible for -

- preparing and maintaining dip mixtures and top-up mixtures (refer 7.2);
- maintaining dip preparation, top-up and treatment records (refer 7.2.7 and 7.5);
- maintaining dip concentration testing analysis records (refer 7.6.4);
- where applicable, calibrating mechanical fruit feeding equipment and maintaining calibration test records (refer 7.8.1);
- maintaining dipping equipment (refer 7.9).

The **Authorised Dispatcher** is responsible for -

- ensuring all packages covered by an Assurance Certificate issued by the business under this Operational Procedure are identified (refer 7.11.1);



- maintaining copies of all Assurance Certificates issued by the business under the ICA arrangement (refer 7.12).

Authorised Signatories are responsible for -

- ensuring, prior to signing and issuing an Assurance Certificate, that produce covered by the certificate has been prepared in accordance with the business's ICA arrangement, and the details on the certificate are true and correct in every particular (refer 7.11.2).

6. REQUIREMENT

6.1 Dimethoate

Full immersion of the fruit in a mixture containing **400mg/L dimethoate** for a period **of not less than 60 seconds**.

Dipping **must** be the last treatment before packing, except that a non-recovery gloss coating ("wax") may be applied to citrus **not less than 60 seconds** after treatment.

Citrus fruit may be washed, treated with a fungicide and/or a gloss coating applied a minimum of 24 hours after dipping.

Longan, Lychee, Passionfruit, Star Apple and Rambutan may be dipped for **10 seconds**, after which they **must** remain wet for a period **of not less than 60 seconds**.

6.2 Fenthion

Full immersion of the fruit in a mixture containing **412.5mg/L fenthion** for a period **of not less than 60 seconds**.

Dipping **must** be the last treatment before packing.

Longan, Lychee, Passionfruit and Rambutan may be dipped for a period of **10 seconds**, after which they **must** remain wet for a period **of not less than 60 seconds**.

The Department of Primary Industry and Fisheries and interstate quarantine authorities maintain the right to inspect at any time certified produce and to refuse to accept a certificate where produce is found not to conform to specified requirements.

Some produce may be damaged by chemical treatments. Businesses applying chemical treatments should check with experienced persons such as departmental officers for any available information. Testing of small quantities is recommended.

The business must use products registered under the AgVet Code in accordance with the instructions included on the product's approved label or issued by the Northern Territory Government or an APVMA permit, and follow any first aid, safety, protection, storage and disposal directions on the product label or permit.

Treatment facilities must comply with the requirements of the local government,

environmental and workplace health and safety authorities.

Following the required treatments in this procedure does not absolve the business from the responsibility of ensuring that treated produce does not contain a pesticide residue above the Maximum Residue Level (MRL).

7. PROCEDURE

7.1 Accreditation

7.1.1 Application for Accreditation

A business seeking accreditation for an ICA/CA arrangement under this Operational Procedure **shall** submit an Application for Accreditation (refer Attachment 1) at least 10 working days prior to the intended date of commencement of certification of produce.

Applicants **must** provide the details of all produce, plants and plant products they intend to pack and certify under this ICA/CA arrangement in Section 4 of the Application for Accreditation. Ensure application form is completed correctly and all required attachments are provided. A copy of the application form **must** be maintained for audit purposes.

Each accredited business is provided with a unique Interstate Produce (IP) number to identify the business and its produce, plants and plant products for all interstate plant quarantine purposes as ministered by the Certificate of Accreditation.

7.1.2 Audit Process

Desk Audit

When the application is received a desk audit is conducted to ensure the application is completed correctly with the required attachments. If found to be incomplete the application form will be returned to the business for completion. Once the desk audit has been passed, an initial/compliance audit will be conducted.

Initial Audit

Prior to accrediting a business, an Inspector carries out an initial audit of the business to verify the ICA/CA system is implemented and capable of operating in accordance with the requirements of the Operational Procedure, and the system is effective in ensuring compliance with the specified requirements of the ICA/CA arrangement.

On completion of a successful initial audit, applicants will be granted provisional accreditation for a period of 4 weeks and a 'Certificate of Accreditation' for Provisional Certification will be issued (refer 7.1.3).

Initial Compliance Audit

In the first year of accreditation an initial compliance audit will be conducted within 4 weeks of accreditation. On completion of successful initial compliance audit the business **shall** be granted full accreditation.



On completion of a successful compliance audit, annual accreditation is granted to cover the current season, up to a maximum of twelve months from the date of provisional accreditation, and a new 'Certificate of Accreditation' issued (refer 7.1.3).

Compliance Audits

Compliance audits are conducted to verify that the ICA/CA system continues to operate in accordance with the requirements of the Operational Procedure.

Ongoing compliance audits are conducted at least once every six months for a business that operates for more than six months of each year.

Random audits are conducted on a selected number of accredited businesses each year. Random audits may take the form of a full compliance audit, or audits of limited scope to sample treatment mixtures, certified produce, ICA/CA system records or ICA/CA system processes.

Unscheduled compliance audits may be conducted at any time as a random audit or to investigate reported or suspected non-conformances.

Re-Accreditation

Accredited businesses are required to re-apply for accreditation each year the business seeks to operate under the ICA/CA arrangement. Businesses seeking re-accreditation **must** lodge a renewal application prior to accreditation lapsing, or if accreditation has lapsed, prior to being accredited to certify produce under the ICA/CA arrangement.

A compliance audit is conducted within twelve weeks of the business applying for re-accreditation each year.

7.1.3 Certificate of Accreditation

An accredited business will receive a 'Certificate of Accreditation for an Interstate Certification Assurance' detailing the facility location, Operational Procedure, scope (type of produce and chemical covered) and period of accreditation.

The business **must** maintain a current 'Certificate of Accreditation for an Interstate Certification Assurance' and make this available on request by an Inspector.

A business may not commence or continue certification of produce under the ICA/CA arrangement unless it is in possession of a valid and current 'Certificate of Accreditation for an Interstate Certification Assurance' for the facility, procedure, produce type and chemical covered by the Assurance Certificate.

7.1.4 Non-conformances and Sanctions

7.1.4.1 Non-conformances

Audits are regularly undertaken to evaluate the effectiveness of implementation of the requirements. If, in the opinion of the auditor, there is evidence indicating that there has been a failure to meet one or more accreditation requirements, the auditor may raise a Non-



conformance Report (NCR). Actions required to address the non-conformance **shall** be discussed and recorded on the NCR.

If integrity of the accreditation has been significantly compromised, the non-conformance may provide grounds for the suspension or cancellation of the accreditation, and prosecution.

7.1.4.2 Incident Reports

Incident Reports may be raised by intra and/or interstate quarantine authorities to report the detection of a non-conformance in produce certified under this arrangement. An investigation into the incident **shall** be conducted and findings reported back to the originator.

If the integrity of the accreditation has been significantly compromised, the incident may provide grounds for the suspension or cancellation of the accreditation, and prosecution.

7.1.4.3 Suspension and Cancellation

The NTQ may suspend or cancel an accreditation when a business is found, to have:

- obtained accreditation through the provision of false or misleading information;
- contravened a procedure requirement that compromises the integrity of the arrangement;
- not rectified a non-conformance;
- not paid fees owing to the NTQ.

Any action taken by the NTQ to suspend or cancel an accreditation **shall** be provided in writing to the business. This **shall** provide guidance making an appeal to have the decision be reviewed.

7.1.4.4 Prosecution

Businesses found to be operating contrary to the Act may be liable for prosecution.

7.1.4.5 Charging Policy

Plant Biosecurity fees will apply to businesses that participate in ICA/CA arrangements. NTQ can be contacted for a schedule of the Plant Biosecurity fees.

7.2 Dip Preparation

The Treatment Operator **shall** prepare a fresh dip mixture at a maximum of every 48 hours or more frequently as required.

Unused dip mixture may be held overnight for use the next day, however the mixture **must** be thoroughly mixed for at least two minutes prior to further use.

Periods longer than 48 hours may be considered where a business can demonstrate by analysis of the chemical mixture (refer 7.6) the ability to control and maintain concentration for a specified longer period.



7.2.1 Volume Of The Dip Tank

Permanent volume indicator marks **shall** be made on the inside of the dip tank, or on a sight tube or sight panel on the outside of the tank, or by some other device which clearly and accurately indicates the **maximum mixture level** and any **incremental volumes** used.

Volume indicator marks **shall** include the volume in litres required to fill the tank to that level.

7.2.2 Calculating The Quantity Of Concentrate To Add To The Dip Mixture

Dimethoate

Using the calibrated volume of the dip tank, calculate 1ml of a concentrate containing 400g/L dimethoate for every litre of mixture in the dip tank.

Fenthion

Using the calibrated volume of the dip tank, calculate 0.75ml of a concentrate containing 550g/L fenthion for every litre of mixture in the dip tank.

A similar calculation may be used when part filling the tank to a known incremental volume.

7.2.3 Dip Mixture Preparation Chart

The business **shall** maintain a Dip Mixture Preparation Chart (refer Attachments 4 and 5) or similar record in close proximity to the dipping equipment.

The chart **shall** provide the following details -

- (a) the total volume in litres of the dip tank when filled to the **maximum mixture level** mark;
- (b) the volume in millilitres (ml) of concentrate required to achieve 400mg/L dimethoate or 412.5mg/L fenthion in a full tank of the made up dip mixture;
- (c) the volume in millilitres (ml) of a concentrate required to achieve 400mg/L dimethoate or 412.5mg/L fenthion in a made up dip mixture for **incremental volumes** or top-up volumes used (refer 7.4.1);
- (d) the printed name and signature of the person responsible for the chart's preparation and the date of preparation.

7.2.4 Ensuring Correct pH

Dimethoate dips **shall** be maintained at a pH below 7.0 to prevent breakdown of the pesticide.

The Treatment Operator **shall** regularly check the dip water and monitor the dip mixture to ensure correct pH by testing with a pH tester. Dip pH checks **shall** be recorded by the Treatment Operator.

After measuring the pH, the Treatment Operator **shall** determine if a pH buffer is required.

An acidifying buffer (eg vinegar) may be used to achieve and maintain an acceptable pH level.



7.2.5 Preparing The Dip Mixture

If a buffer is required, add it to the empty dip tank or during filling.

Using a clean graduated measuring vessel, measure the required amount of chemical needed to achieve either 400mg/L of dimethoate or 412.5mg/L of fenthion for the required volume of **mixture**, as specified on the Dip Mixture Preparation Chart.

Suitable measuring vessels are measuring cylinders or syringes.

Add the required amount of concentrate to the dip tank in accordance with the manufacturer's directions on the label.

Fill the tank with clean water to the appropriate **incremental volume** mark or **maximum mixture level** mark.

Other ingredients may only be added to the mixture if they are known to be compatible with the chemical used to control fruit flies.

Ensure that the chemical is completely diluted in all of the water by vigorously mixing the tank for a minimum of two minutes before commencing the dip operation. Some facilities may require extended periods of mixing to fully dilute the chemical in the water.

7.2.6 Pre-Dipping Treatments

Fruit can be treated with water or other chemical treatments prior to dipping with dimethoate or fenthion provided there is enough time for the majority of the water to drain off to minimise the dilution of the dip mixture.

The direct addition of chemicals to the wash water, or carriage of chemicals on fruit, that raise pH or otherwise destroy the pesticide **must** be avoided.

Where fruit has undergone pre-dip washing or chemical treatment, a dip top-up program may be required to maintain the dip mixture concentration within the required tolerance (refer 7.4).

7.2.7 Dip Preparation Records

Records of dip mixture preparation **shall** be maintained by the Treatment Operator which record the date, time and volumes of concentrate and water used to prepare the dip mixture (refer 7.5).

7.3 Dipping

Fruit should be clean before dipping to avoid fouling the dip mixture and restricting or reducing contact of the chemical with the fruit surface.

7.3.1 Manual Fruit Immersion

The Treatment Operator **shall** ensure all fruit are placed into appropriate dipping containers.



These containers **must** be made from a material that allows adequate circulation of the dipping mixture over and around the fruit.

For example, plastic crates, wooden slatted or open metal bulk bins or perforated plastic buckets may be used.

Place the containers into the dip, ensuring that all fruit is fully immersed and fruit does not float from containers. A mesh lid or other device may be required to ensure all fruit remains fully immersed during dipping.

Allow the minimum time period for the fruit type after complete immersion (refer 6.). An accurate timing mechanism capable of measuring time to the second **shall** be used for timing fruit immersion.

Remove the container from the dip and allow the pesticide mixture to drain from the container. Repeat the process until all fruit has been treated.

7.3.2 Mechanical Fruit Feeding

The Treatment Operator **shall** ensure mechanical fruit feed equipment is designed and operated to ensure fruit remains completely immersed in the dip mixture for the required time period (refer 7.8).

Fruit feed mechanisms **must** be designed in a manner that prevents fruit from passing through the dip in less than the required time period as specified in 6. Requirements.

Operation of equipment and volume of fruit feeding through the dip **shall** be carefully monitored by the Treatment Operator to ensure fruit is prevented from being pushed or carried through the dip in less than the required time period.

Small fruits that may be dipped for ten (10) seconds **must** be allowed to remain wet with chemical for at least a further sixty (60) seconds after dipping for ten (10) seconds.

7.3.3 Last Treatment Before Packing

Dip Treatments **must** be the last treatment before packing.

The Treatment Operator **shall** ensure that no other treatments, such as fungicide treatment or washing, are applied to fruit between dipping and packing. However, other processes may be approved provided they do not affect the efficacy of the dip treatment.

Citrus fruits only may -

(a) have a non-recovery gloss coating (wax) applied at least (60) seconds after dipping with dimethoate;

OR

(b) be washed, fungicide treated and/or have a gloss coating applied a minimum of 24 hours after dipping with dimethoate.



7.4 Maintaining Dip Concentration and Volume

Concentration of the chemical mixture **must** be maintained within $\pm 15\%$ of the required concentration at all times as specified (refer 6.).

7.4.1 Topping Up

During the dipping process it may be necessary for the Treatment Operator to top-up the dip mixture to maintain dip concentration and/or volume. This is done by adding the required volume of water and the required volume of concentrate to the dip mixture as determined by the facility's top-up program (refer 7.4.2).

Add the required amount of concentrate to the dip tank prior to topping-up with water (if required) to assist mixing of the chemical and the water.

Add the required volume of water (if required) to the dip tank using a graduated measuring vessel or a liquid metering device, or use **incremental volume** marks marked on the side of the dip tank.

Ensure that the chemical is completely diluted in all of the water by thoroughly mixing the tank for a minimum of two minutes before recommencing the dip operation.

7.4.2 Top-Up Program

A facility which uses topping-up as a means of maintaining dip volume and/or concentration **must** develop and document a top-up program for maintaining dip concentration.

The top-up program **shall** state -

- (a) the frequency of topping-up based on the quantity of fruit treated or time; and
- (b) the quantity of concentrate and water required to be added.

The business **shall** provide evidence that the dip top-up program being used is effective in achieving and maintaining dip concentration within $\pm 15\%$ of the required concentration (refer 7.6).

7.4.3 Top-Up preparation Records

Records of dip top-up preparation **shall** be maintained by the Treatment Operator which record the date, time and volumes of concentrate and water added to the dip mixture (refer 7.5).

7.5 Treatment Records

The Treatment Operator **must** record all dip mixture preparation, top-up mixture preparation and fruit treatment using a Dip Mixture Preparation, Top-Up and Treatment Record (refer Attachment 3) or records which capture the required information.

The business's treatment records **must** record -

- the date of dip mixture or top-up mixture preparation;
- the time of dip mixture or top-up mixture preparation;



- the volume of concentrate used (millilitres);
- the total volume of the made-up dip mixture or top-up mixture (litres);
- the trade name of the concentrate and the chemical used;
- the date the dip mixture was discarded;
- the date of treatment;
- the treatment commencement time;
- the treatment completion time;
- the type of fruit treated;
- the approximate quantity of fruit treated;
- the identification of the Treatment Operator.

7.6 Dip Concentration Testing

The business **must** verify the ability to achieve and maintain dip concentrations by providing results of analysis of samples of a dip mixture from an approved laboratory.

7.6.1 Frequency of Sampling

Newly purchased dimethoate concentrate **must** be sampled before use and at least every 3 months during use thereafter.

Fenthion concentrate need not be sampled as long as it is within expiry date.

Dip mixtures of either dimethoate or fenthion **must** be sampled at least every 3 months and at any time the species of fruit being handled is changed or if there is a change to the method of processing the same species of fruit which could affect the concentration of insecticide. Such a change may be whether fruit is wet or dry before treatment.

Samples **shall** be collected -

- (a) once prior to initial approval of the facility (so an analysis result is available for the Inspector carrying out the initial audit of the business's facility and operating procedures); and
- (b) immediately following preparation of the dip mixture; and
- (c) at cessation of treatment after the chemical mixture has been used to treat the maximum quantity of fruit that will be treated in the facility before a dip mixture is discarded.

An additional dip mixture sample is required for a facility using a top-up program after topping-up the mixture according to the facility's documented top-up program.

7.6.2 Collection of the Sample

Samples of the dip **shall** be taken from the centre of the dip tank, and placed in a **clean glass sample bottle** with a secure water tight lid. The sample size will be of sufficient quantity for chemical analysis.



7.6.3 Storing and Packaging the Sample

Samples should be stored under refrigeration and dispatched within 24 hours of collection to minimise losses in chemical concentration.

Samples **must** be carefully packaged to prevent damage in transit and comply with any hazardous chemical packaging and transport requirements.

Samples **shall** be accompanied by a completed Sample Analysis Request form for chemical used in fruit fly dips (refer Attachment 6).

7.6.4 Chemical Mixture Analysis Records

Results of the analysis **must** be retained by the business for a minimum of 24 months from receipt and be made available when requested by an Inspector (refer 7.12).

Details of chemical mixture analysis results **shall** be maintained using a Chemical Mixture Analysis Record (refer Attachment 7 and 8) or records which capture the required information.

The business's chemical mixture analysis records **must** include -

- the date and time of collection of the sample;
- the full trade name, batch no. and expiry date of the concentrate used;
- the total volume of concentrate added to the dip mixture;
- the total volume of the prepared dip mixture from which the sample was taken.

Additional data that should be recorded by the business includes -

- the name and quantity of any detergents, fungicides or other additives added to the dip mixture;
- type and quantity of fruit treated prior to collection of the sample;
- whether the fruit was dry, moist or wet when it entered the dip mixture.

Once accredited, any deficiency in an analysis result (refer 7.4) **must**, as soon as practical, be reported to the Operations Manager at NTQ so an investigation may be carried out to determine the cause and rectify any problems.

7.7 Disposal of the Dip Mixture

The treatment facility **must** have the facilities to dispose of the dip mixture in a manner consistent with the label instructions or as recommended by relevant governing authorities.

7.8 Dip Calibration - Mechanical Fruit Feeding

The Treatment Operator **shall** carry out calibration tests on mechanical fruit feed equipment at regular intervals.

Calibration tests **shall** be carried out at a minimum of -



- (a) once immediately prior to commencement of treatment and certification of produce each season for each fruit type being treated; and
- (b) within a minimum of four weeks from commencement of treatment each season, or prior to the annual compliance audit, whichever is the earlier; and
- (c) once a month during each fruit season.

The Treatment Operator **shall** ensure that fruit species that only require a ten (10) second dip (refer 6.) remain wet and do not undergo any drying process (eg. fans, blowers or heaters) for at least a further sixty (60) seconds after the fruit has been fully immersed in the dip for 10 seconds.

Calibration tests may be carried out by placing an identifiable piece of fruit (eg. marked with a waterproof ink) on the feed mechanism with a normal flow rate of other fruit. The Treatment Operator times the period that the marked piece of fruit is immersed in the dipping mixture.

This process is repeated three times and on each occasion the fruit must remain fully immersed in the dipping mixture for the required minimum time period. Small fruits requiring only a ten second dip must remain wet for a further sixty seconds after dipping for ten seconds.

If any of the tests reveal that fruit is not remaining fully immersed for the required minimum time period, the equipment shall be adjusted and the procedure repeated until a satisfactory result is achieved.

7.8.1 Dip Calibration Test Records

Records of mechanical fruit feed calibration tests **shall** be maintained by the Treatment Operator which record -

- (a) the name of the person conducting the test;
- (b) the date of testing; and
- (c) the results achieved during the test.

An example Mechanical Fruit Feed Calibration Test Record is included as Attachment 9.

7.9 Dip Maintenance

The Treatment Operator **shall** carry out regular checks of dipping equipment to ensure it continues to operate effectively and remains free from soiling, malfunction, blockages, damage or excessive wear.

7.10 Post Treatment Security (Tasmania only)

Packing **shall** commence as soon as practicable after treatment. Fruit may be allowed to dry adequately prior to packing.



Treated fruit **shall** be held for the minimum practical period after treatment before it **must** be secured against reinfestation.

Any fruit which is stored outside the treatment facility after treatment and prior to dispatch **must** be held under secure conditions.

Any treated fruit which remains unpacked at the end of the day **must** be held in secure conditions until packed. Completed pallets **shall** be held for the minimum practical period before placing in secure conditions.

Certified fruit **must** be stored at and transported from the facility in secure conditions which prevent infestation by fruit fly.

Certification Assurance certificates **must** state that fruit was; "Packed in such a way as to prevent re-infestation by insects."

Secure conditions include -

- (a) unvented packages;
- (b) vented packages with the vents secured with gauze/mesh with a maximum aperture of 1.6mm;
- (c) fully enclosed under tarpaulins, hessian, shade cloth, mesh or other covering which provides a maximum aperture of 1.6mm;
- (d) shrinkwrapped and sealed as a palletised unit;
- (e) fully enclosed or screened buildings, coldrooms, vehicles or other facilities free from gaps or other entry points greater than 1.6mm.

Fruit consigned to Tasmania must be transported in full container lots sealed prior to transport, or as lesser container lots in accordance with the requirements of (a), (b) or (d) above.

Where consignments are transported to Tasmania as full container lots, the seal number must be included in the Brand Name or Identifying Marks section of the Assurance Certificate covering the consignment (refer Attachment 2).

Where consignments are transported in vented packages that are sealed as a palletised unit in accordance with (d) above, the business must secure the top layer of the pallet by applying a row of tape over the shrinkwrap and have applied to the tape in waterproof ink the signature of an Authorised Signatory, the number of the Plant Health Assurance Certificate covering the consignment and the date.

The business **shall** have adequate procedures in place which prevent mixing of treated and untreated fruit at the facility.



7.11 Dispatch

7.11.1 Package Identification

The Authorised Dispatcher **shall** ensure that, after treating and packing, each package is marked in indelible and legible characters of at least 5mm, on the end of every package with -

- the "A" Registration (IP) number of the business that operates the approved facility in which the produce was treated; and
- the words "MEETS ICA-01"; and
- the date (or date code) on which the fruit was treated;

prior to the issuance of an Assurance Certificate by the business under this Operational Procedure.

Any Packages containing fruit that has not been treated in accordance with the requirements of this Operational Procedure shall not be marked as stated above.

7.11.2 Assurance Certificates

The Authorised Dispatcher **shall** ensure an Assurance Certificate is completed and signed by an Authorised Signatory of the business prior to consignment of produce to a market requiring certification of dimethoate or fenthion dip treatment.

Assurance Certificates **shall** be in the form of a Plant Health Assurance Certificate (PHAC). A completed example is shown (refer Attachment 2).

Individual Assurance Certificates **shall** be issued to cover each consignment (ie. a specified quantity of product transported to a single consignee at one time) to avoid splitting of consignments.

Assurance Certificates **shall** be completed, issued and distributed in accordance with the Work Instruction Guidelines for Completion of Plant Health Assurance Certificates (WI-02).

7.11.3 Assurance Certificate Distribution

The **original** (yellow copy) **must** accompany the consignment.

The **duplicate** (white copy) **must** be retained by the business.

The **triplicate** (green copy) **must** be sent to NTQ.

7.12 ICA System Records

The business **shall** maintain the following records -

- (a) Dip Mixture Preparation Chart (refer 7.2.3);
- (b) Dip Mixture Top-Up Program (if dip mixture is topped-up) (refer 7.4.2);
- (c) Dip Mixture Preparation, Top-Up and Treatment Record (refer 7.5);
- (d) Chemical Mixture Analysis Record (refer 7.6.4);
- (e) Mechanical Fruit Feed Calibration Test Record (if mechanical fruit feed equipment is used) (refer 7.8.1);

- (f) the duplicate copy of each Plant Health Assurance Certificate (Attachment 2) issued by the business (refer 7.11.3).

ICA system records **shall** be retained for a period of not less than 24 months from completion.

ICA system records **shall** be made available on request by an Inspector.

7.13 ICA System Documentation

The business **shall** maintain the following documentation -

- (a) a copy of the business's current Application for Accreditation (refer Attachment 1);
- (b) a current copy of this Operational Procedure;
- (c) a current Certificate of Accreditation for an Interstate Certification Assurance.

ICA system documentation **shall** be made available on request by an Inspector.

8. ATTACHMENTS

Attachment 1	Application for Accreditation of a Business for an Interstate Certification Assurance (ICA) and/or Certification Assurance (CA) Arrangement	(BLANK)
Attachment 2	Plant Health Assurance Certificate (PHAC)	(COMPLETED EXAMPLE)
Attachment 3	Dip Mixture Preparation, Top-Up and Treatment Record	(BLANK)
Attachment 4	Dip Mixture Preparation Chart	(BLANK)
Attachment 5	Dip Mixture Preparation Chart	(COMPLETED EXAMPLE)
Attachment 6	Sample Analysis Request	(BLANK)
Attachment 7	Chemical Mixture Analysis Record	(BLANK)
Attachment 8	Sample Analysis Report	(BLANK - EXAMPLE)
Attachment 9	Mechanical Fruit Feed Calibration Test Record	(BLANK)

Tick each box that describes your business and the ICA/CA arrangement and provide specific details where required. Only one arrangement, that is one Operational Procedure/Procedure at one Facility, may be covered in one application.

Indicate the type of application being made.

New
 Renewal
 Amendment

1. Business/Person Details

(a) Type of Ownership of Business

Individual
 Incorporated Company
 Other
 Partnership
 Cooperative Association
 (please specify)

(b) Name of Business/Person

Please supply name in full. For a partnership, list the full names of each partner in their normal order. Companies must provide their Australian Company Number (ACN) or Australian Registered Body Number (ARBN) and attach a copy of the Certificate of Incorporation. Cooperative associations must provide appropriate proof of registration (i.e. a copy of the Certificate of Registration or registration search from the Office of Business Affairs or Australian Securities Commission)

ARBN
 ACN

(c) Trading Name/s of the Business/Person (as shown on packages sent to market)

--

(d) Postal address of the Business/Person

Telephone: ()
 Facsimile: ()
 Mobile:

E-mail

(e) Has the business/person been registered previously for the interstate movement of produce?

Yes
 No

If yes, give the business's/persons Interstate Produce (IP) Number

A

2. Operational Procedure and Facility Details

a) Operational Procedure used in this arrangement

Reference No.	Title of Operational Procedure
<input style="width: 100%;" type="text"/>	<input style="width: 100%;" type="text"/>

(b) Street address of the facility

Telephone: ()
 Facsimile: ()
 Mobile:

3. Authorised Signatories (for Plant Health Assurance Certificates)

	Family Name	Given Name/s	Specimen Signature
Certification Controller			
Back-up Certification Controller			
Additional Authorised Signatories			

4. Types of Produce to be Prepared Under the ICA/CA Arrangement (if insufficient space, attach a list)

5. Interstate Certification Assurance/Certification Assurance System Records

(a) What records do you maintain to verify that the business is carrying out its responsibilities and duties under the Operational Procedure?

- We maintain all our records in accordance with the examples provided in the Operational Procedure.
 We have developed alternative or additional records to those provided in the Operational Procedure.

(b) List the alternative or additional records you intend to use and attach a copy to this application.

(a) (b) (c)

6. Accreditation Conditions

(a) For the purposes of this agreement the following definitions shall apply:-

- Applicant* means the person, **corporation**, or other legal entity who is accredited under this agreement.
Inspector means an inspector appointed under the *Plant Health Act*
Department means the Department of Primary Industry and Fisheries
Interstate Certification Assurance System means the processes, equipment, personnel and resources used to implement the Operational Procedure nominated in Section 2(a).

- (b) The applicant must maintain and operate the interstate certification assurance system in accordance with the Operational Procedure as nominated in Section 2(a), and must maintain the records specified in Section 5.
 (c) The applicant will, upon request, allow an inspector to enter any premises where produce certified under the agreement is treated or dispatched, or where any produce, equipment, chemicals, documents for records are stored.
 (d) The inspector may inspect or take samples of any relevant item present on the premises at the time of the inspection.
 (e) The applicant must take all steps to assist an inspector in the conduct of audits including allowing the inspector or officer to interview any employee of the applicant in relation to the Implementation of the Interstate Certification Assurance System.
 (f) The applicant authorises the persons listed in Section 3 of this application to issue certificates on his or her behalf.
 (g) In the event of cancellation or non-renewal of this arrangement the certificate pad and any green copies must be returned as they remain the property of Northern Territory Quarantine.
 (h) Plant Biosecurity fees will apply to those businesses/persons that choose to participate in this ICA/CA arrangement. Northern Territory Quarantine can be contacted for a schedule of the Plant Biosecurity fees.

The applicant agrees to abide by the accreditation conditions listed above and acknowledges that any accreditation is granted subject to those conditions.

The applicant certifies that all of the information contained in this application is true and correct.

Signature/s	Date

Note: Where the applicant is a corporation, the company seal must be applied, and signed, in the appropriate form. Where the applicants are members of a partnership, each of the partners must sign the application.

Office Use Only

Desk Audit	<input type="checkbox"/> Passed	<input type="checkbox"/> Failed	
Name (print) _____	Date received ____/____/____		
Signature: _____	Date completed ____/____/____		

Post your application/s to: Department of Primary Industry and Fisheries, NT Quarantine
 GPO Box 3000, DARWIN NT 0801



Plant Health Assurance Certificate

Consignment Details (PLEASE PRINT)

CONSIGNOR (FROM)
Name <i>Joe's Guava Farm Pty Ltd</i>
Address <i>Lot 2000 Beddington Road</i> <i>Humpty Doo NT 0836</i>

CONSIGNEE (TO)
Name <i>Adelaide Produce Market</i>
Address <i>Burma Road</i> <i>Pooraka South Australia 5095</i>

RECONSIGNED TO (Splitting consignments or reassigning whole consignments).
Name
Address

BRAND NAME OR IDENTIFYING MARKS (as marked on packages)	DATE OR DATE CODE (as marked on packages)
<i>Joe's Guava Farm</i>	<i>18032014</i>

Number of Packages	Type of Packages (e.g. trays, cartons)	Type of Produce	Authorisation for Split Consignment
<i>40</i>	<i>Cartons</i>	<i>Guavas</i>	

Treatment Details

Treatment	Chemical (Active Ingredient)	Treatment Date	Concentration / Duration and Temperature
<i>Dipping</i>	<i>Dimethoate</i>	<i>16/03/2014</i>	<i>(400 ppm) for 1 min</i>

Additional Certification / Codes

Meets ICA01

Declaration

I, an authorised Signatory of the accredited business that prepared the plants or plant produce described above, hereby declare that the plants or plant produce have been prepared in the business's approved facilities in accordance with the *Plant Health Act* and that the details shown above are true and correct in every particular.

AUTHORISED SIGNATORY'S NAME (PLEASE PRINT)	SIGNATURE	DATE
<i>Joe Signatory</i>	<i>Joe Signatory</i>	<i>18/3/2014</i>

Certification Details (PLEASE PRINT)

IP NUMBER	FACILITY NUMBER	PROCEDURE
<i>A 9999</i>	<i>01</i>	<i>ICA- 01</i>

ACCREDITED BUSINESS THAT PREPARED THE PRODUCE
Name <i>Joe's Guava Farm Pty Ltd</i>
Address <i>Lot 2000 Beddington Road</i> <i>Humpty Doo NT 0836</i>

GROWER OR PACKER
Name <i>As Above</i>
Address

OTHER FACILITIES SUPPLYING PRODUCE

DIP MIXTURE PREPARATION CHART

Attachment 4

CHEMICAL CONCENTRATE = _____

FULL DIP TANK VOLUME = _____ LITRES

CONCENTRATE TO FULL TANK = _____ MILLILITRES

Part Fill or Top-Up (Concentrate [ml]/Mixture [L])

_____ ml Concentrate/_____ Litres Mixture

_____ ml Concentrate/_____ Litres Mixture

_____ ml Concentrate/_____ Litres Mixture

_____ ml Concentrate/_____ Litres Mixture

_____ ml Concentrate/_____ Litres Mixture

_____ ml Concentrate/_____ Litres Mixture

_____ ml Concentrate/_____ Litres Mixture

Prepared by: _____ / /
Printed Name Signature Date

DIP MIXTURE PREPARATION CHART

Attachment 5

CHEMICAL CONCENTRATE = FENTHION
FULL DIP TANK VOLUME = 1,400 LITRES
CONCENTRATE TO FULL TANK = 1,050 MILLILITRES

Part Fill or Top-Up (Concentrate [ml]/Mixture [L])

37.5 ml Concentrate / **50** Litres Mixture

75 ml Concentrate / **100** Litres Mixture

187.5 ml Concentrate / **250** Litres Mixture

300 ml Concentrate / **400** Litres Mixture

375 ml Concentrate / **500** Litres Mixture

562.5 ml Concentrate / **750** Litres Mixture

750 ml Concentrate / **1000** Litres Mixture

Prepared by: *T OPERATOR*
Printed Name

T OPERATOR
Signature

12/03/14
Date

CHEMICAL MIXTURE ANALYSIS RECORD

Attachment 7

SAMPLE DETAILS	CHEMICAL MIXTURE DETAILS	FRUIT DETAILS	ANALYSIS DETAILS
Date of Sampling -	Trade Name of Concentrate -	Other Additive/s -	Fruit Treated -
			Laboratory -
Time of Sampling -	Batch No.-	Volume of Additive/s -	Quantity Treated -
			Analysis No.-
	Volume of Concentrate -	Total Volume of Mixture -	Condition <input type="checkbox"/>
Sample No.-	ml	ml	<input type="checkbox"/> Dry <input type="checkbox"/> Moist <input type="checkbox"/> Wet
			Analysis Result -
Date of Sampling -	Trade Name of Concentrate -	Other Additive/s -	Fruit Treated -
			Laboratory -
Time of Sampling -	Batch No.-	Volume of Additive/s -	Quantity Treated -
			Analysis No.-
	Volume of Concentrate -	Total Volume of Mixture -	Condition <input type="checkbox"/>
Sample No.-	ml	ml	<input type="checkbox"/> Dry <input type="checkbox"/> Moist <input type="checkbox"/> Wet
			Analysis Result -
Date of Sampling -	Trade Name of Concentrate -	Other Additive/s -	Fruit Treated -
			Laboratory -
Time of Sampling -	Batch No.-	Volume of Additive/s -	Quantity Treated -
			Analysis No.-
	Volume of Concentrate -	Total Volume of Mixture -	Condition <input type="checkbox"/>
Sample No.-	ml	ml	<input type="checkbox"/> Dry <input type="checkbox"/> Moist <input type="checkbox"/> Wet
			Analysis Result -
Date of Sampling -	Trade Name of Concentrate -	Other Additive/s -	Fruit Treated -
			Laboratory -
Time of Sampling -	Batch No.-	Volume of Additive/s -	Quantity Treated -
			Analysis No.-
	Volume of Concentrate -	Total Volume of Mixture -	Condition <input type="checkbox"/>
Sample No.-	ml	ml	<input type="checkbox"/> Dry <input type="checkbox"/> Moist <input type="checkbox"/> Wet
			Analysis Result -

