

ORC Evidence Requirements for the Melon Industry

Revision history

Version	Date issued	Amendment Details	
		Element(s)	Details
1.0	14 July 2022	All	New ORC evidence framework. Endorsed by the Australian Melon Association Inc., government Parties and the Plant Health Australia Board.

Notes in respect of this evidence framework

The melon industry Owner Reimbursement Costs (ORC) evidence framework only applies to Owners from the melon industry.

ORCs for the melon industry are calculated using the formula for annual short rotation crops (*schedule 6, part 4.4.12 of the Emergency Plant Pest Response Deed, [3 March 2022]*). This formula is: **ORC = (A – B) + C + D + E – F + G**. A definition for each component of this formula is provided in the following table. The evidence requirements for each component are presented in hierarchical order of use. This means that where more than one option is presented, the valuation must proceed starting with the first option and if that data is not available or relevant, progressing to the second option, followed by the third option and so on.

Regional differences will need to be taken into account throughout the evidence framework.

The melon industry is currently exploring the development of a gross margins tool to be used as supporting material for this evidence framework. The gross margins tool will include benchmarking data. Once completed the ORC evidence framework will be updated to include reference to this tool as appropriate.

The following statement taken from the *Guidelines for owner reimbursement costs under the plant pest deed* (Centre for International Economics, June 2004 available at planthealthaustralia.com.au/biosecurity/incursion-management/owner-reimbursement-costs) provides clarity in relation to framework elements E and F; specifically, that unless a bare fallow is required under the Response Plan (i.e. no alternative crop can be grown), ORCs will only apply for the year in which the melon crop is destroyed. Any profits earned from an alternative crop grown in the year of melon destruction are to be deducted from the ORC under element F.

"To avoid double counting, where the land on which the Crop is destroyed is allowed to be used for other purposes during the same growing season (grazing, potato production etc), the net profits derived from such enterprises in the current season would be deducted from Owner Reimbursement Costs.

Where the Crop destroyed cannot be grown on the same land the following year, but there is no requirement to fallow the land - the land can be used for other purposes (for example, growing another Crop or some other use of the owner's choice), no Owner Reimbursement Costs would be payable for the second year. In many cases alternative Crops would be grown anyway as part of the normal farming rotation management system."

Key terms used in this evidence framework

Term	Definition
Authorised Person(s)	Where key variables of the ORC need to be assessed, potentially having significant financial or 'moral hazard' implications, an Authorised Person should be used in the determination of the appropriate value. Such persons: (a) should be appropriately authorised under relevant legislation and procedures (usually of the Affected jurisdiction); (b) may be involved in (without limitation) certification, audit or determination of key information as appropriate; (c) should be appropriately qualified for the specified roles; (d) need not be a government employee, but must meet relevant independence and other relevant probity requirements; (e) should be sourced from existing expertise, such as qualified agronomists or hail assessors, where possible and appropriate.
Lead Agency	The agency(s) of the State(s) or Territory(s) which are responsible for leading the conduct of a Response Plan (because of the occurrence of an Incident within their State(s) or Territory(s))
Owner(s)	Owner(s) of a Crop, Crops or sub-group of Crops, or a property, which is/are subject to a Response Plan, or their authorised representative(s). Includes any person, other than a mortgagee not in possession, having or claiming any right, title or interest in a crop or a property, or their authorised representative.
Relevant Parties	In respect of the taking of a decision or action, the Parties which may be affected (or, where they are an Industry Party, the members of which may be affected) by the decision or action.

Note this list is not comprehensive. Refer to clause 1.1 of the EPPRD for definitions of capitalised words/terms (excluding names) used in this evidence framework

ORC Evidence Framework

	Definition of elements from the EPPRD	Evidence requirements (<i>in hierarchical order</i>)	Additional information
A	Estimated farm gate value of the Crop(s) destroyed = $a * y * p$		
	<p>a = area of Crop destroyed or a and y might refer to number of units expected to be sold, such as number of punnets of seedlings.</p>	<p>Certification/assessment by an Authorised Person of the area of Crop that is impacted or identified for destruction using one of the following methods:</p> <ol style="list-style-type: none"> 1. Accurate property maps sourced from the Owner. 2. Satellite imagery. 3. Aerial photographs. <p>An on the ground survey, including Crop number and variety confirmation will be required to verify the Crop impacted or identified for destruction at the time of the incursion. This will be carried out by an Authorised Person.</p>	<ul style="list-style-type: none"> • The jurisdictional legislative instrument (by whatever name) will identify the quarantine zone, area or premises and the Lead Agency must hold appropriate records of the area of Crop impacted or destroyed. • Property maps need to include information on the Crop such as numbers and variety. • Photos and satellite imagery must be high resolution to accurately specify growing area. • Third party accreditation/s such as Freshcare require property Owners to have accurate Crop area maps and therefore the majority of Owners will have these records available. • There are a variety of Apps available and used by Owners to inform Crop area determination. These may be used to supplement information on Crop area sourced through points 1 to 3 in the hierarchy.
	<p>y = yield or a and y might refer to number of units expected to be sold, such as number of punnets of seedlings.</p> <p>The yield estimate is to take into account the type of Crop destroyed.</p>	<p>Certification/assessment of the yield by an Authorised Person using one of the following methods:</p> <ol style="list-style-type: none"> 1. Actual yield determined by harvesting the mature Crop. 2. Expected yield for the immature Crop calculated using: <ol style="list-style-type: none"> (a) Owners yield records for the applicable variety for the current season (if a proportion of the 	<ul style="list-style-type: none"> • Where the whole district is seriously affected by the pest being eradicated, or by regional weather events such as hail or flood and regional yields are clearly distorted, the yield information should take this into account. • Expected yield will take into account the variety/cultivar of Crop impacted or destroyed. The stage of the cropping cycle when the Crop is impacted or destroyed must also be taken into account.

	Definition of elements from the EPPRD	Evidence requirements (<i>in hierarchical order</i>)	Additional information
		<p>Crop has already been harvested from other blocks during the current season).</p> <p>(b) The Owners auditable historical yield data records for the applicable variety averaged over 5 years.</p> <p>(c) Packer records for the Owner for the applicable variety averaged over 5 years.</p> <p>(d) Averages of packer records for the applicable variety for the current season, or if current season data is not available, for the previous 5 years averaged.</p> <p>(e) Local area/regional average for the applicable variety for the current season, or if current season data is not available, for the previous 5 years averaged.</p> <p>If records for the appropriate varieties are not available, 5 year averages for the most similar crop type will be used.</p>	<ul style="list-style-type: none"> • Yields recovered through insurance policies and any insurance premiums are not to form part of ORCs. • New property Owners will need to obtain permission from previous Owners for data release if they wish to use records for the property for their ORC assessment. • Staggered planting and harvesting is common and it is therefore possible that one block of the property has already been harvested at the time the Crop is impacted by the Response Plan. • Average yields are to be measured over 5 years as a longer term average for yield is more relevant. This is because there are so many variables that can affect yield year on year, and it's quite possible that 2 out of 3 years may have had yield issues related to weather or other seasonal conditions. Therefore a 5 year average will give a more accurate indication of yield. • Growers generally pick and pack the Crop on site and therefore packer records are not likely to be widely available.
	<p>p = farm gate price = either:</p> <ul style="list-style-type: none"> • the average market price for the season in the region or marketplace where normal sales take place; or • where there are signed contracts with the price stipulated on the contract, the contract price 	<p>Price at farm gate will be determined using one of the following methods:</p> <ol style="list-style-type: none"> 1. For a mature Crop ready to harvest: <ol style="list-style-type: none"> (a) Owners records for recent sales of the applicable variety during the current season. Where relevant, price data will be adjusted to be consistent with the current market price trend using Market Information Services data for the specific market the Owner usually sells into. 	<ul style="list-style-type: none"> • All prices should be measured at farm gate. • Market price can fluctuate significantly during the season. Due to staggered harvesting an Owner will typically receive different prices across the season. Where possible the price data used to calculate the ORC should reflect this variability. • Owners claiming above average prices must produce auditable records of above average prices in previous years to justify additional amounts in ORCs. • Market Information Services data is available from

	Definition of elements from the EPPRD	Evidence requirements (<i>in hierarchical order</i>)	Additional information
	less any transport or selling costs.	<p>(b) Where the Owner has not made recent sales during the current season, Market Information Services data will be used to identify the current market price trend for the applicable variety and the specific market the Owner usually sells into.</p> <p>2. For an immature Crop an average price will be calculated using Market Information Services data for the applicable variety sourced from relevant points in the current season and applicable to the market that the Owner usually sells into.</p> <p>3. Records for the applicable variety averaged over the previous 3 years sourced from:</p> <p>(a) the Owners auditable historical records.</p> <p>(b) marketer/packer records for the Owner.</p> <p>4. Verifiable local/regional averages for the current season determined from another appropriate market source at the time of the incursion.</p> <p>Prices will need to consider the variability in the quality and grade of the Crop. Owners auditable historical records for the 3 previous years will be used to inform any adjustments made to reflect expected quality and grading values.</p> <p>To obtain the farm gate value for 1 to 4 above the selling costs (such as transport and marketing costs) will need to be subtracted from the market price. The selling costs will be calculated using one of the following methods:</p> <p>1. Owners records for recent sales in the current</p>	<p>http://marketinfo.com.au/.</p> <ul style="list-style-type: none"> • Averages are to be measured over the previous 3 (rather than 5) years to reflect a more current average for price data. Using only the last 3 years to calculate an average provides a more accurate reflection of actual/current prices. • There are a range of processes available to Owners for selling products, though the majority pick and pack the Crop on farm and send directly to market. Owners may choose to: <ul style="list-style-type: none"> ○ Pick and pack their own produce; ○ Pick and then send their produce to a packing house; ○ Have direct contact with retailers; or ○ Sell through a merchant/agent.

	Definition of elements from the EPPRD	Evidence requirements (<i>in hierarchical order</i>)	Additional information
		<p>season.</p> <ol style="list-style-type: none"> Owners historical records for the previous 3 years. Verifiable local/regional averages for the current season determined from another appropriate source at the time of the Incident. 	
B	<p>= Harvesting costs plus any other costs normally associated with Crop production between the time of Crop destruction and selling or harvesting. This is to include normal treatment or packaging and handling costs on farm for some harvested produce (for example washing or dipping of products).</p>	<p>Harvesting and other applicable costs will be determined by one of the following methods:</p> <ol style="list-style-type: none"> Owners auditable historical records from the most recent 3 prior years of production as appropriate. A standard schedule of best practice harvest and production costs based on local or regional contract prices. This will be determined by the Lead Agency in consultation with the Australian Melon Association. 	<ul style="list-style-type: none"> This element includes harvesting and other production costs that would normally be incurred between the time of harvesting and selling if the Crop was not impacted or destroyed. Averages are to be measured over the previous 3 (rather than 5) years to reflect a more current average for harvesting costs. Using only the last 3 years to calculate an average provides a more accurate reflection of actual/current prices and costs. <ul style="list-style-type: none"> For example, if there was an outbreak in 2022, staff and harvest costs would be significantly higher than 4-5 years ago, therefore using a longer timeframe has the potential to dilute the true impact. Harvest labour and cardboard costs are two of the biggest on farm costs. Equipment costs are negligible. Fertiliser costs vary from property to property. If the Owner has already harvested their own Crop (prior to impact to or destruction of the Crop) or is directed to harvest their Crop to make a yield determination, then the harvesting cost component of B will not be deducted from the ORC.
C	<p>= Direct costs associated with the Response Plan incurred by the Owner but not normally incurred as a</p>	<p>This will depend on what the Response Plan requires and will need to be calculated on an Incident by Incident</p>	<ul style="list-style-type: none"> Required actions/treatments by Owners need to be specifically defined in the Response Plan.

	Definition of elements from the EPPRD	Evidence requirements (<i>in hierarchical order</i>)	Additional information
	production expense – including cleaning of equipment or glasshouses etc.	<p>basis.</p> <p>Costs normally incurred by the Owner as a production expense will be determined using one of the following methods:</p> <ol style="list-style-type: none"> 1. Owners auditable records from the most recent 3 prior years of production. 2. A standard schedule of regional gross margins based on standard local or regional contract prices. This will be determined by the Lead Agency in consultation with the Australian Melon Association. <p>A schedule of costs additional to those normally incurred by the Owner that are required by the Response Plan will be developed by the Lead Agency at the time of the Incident.</p>	<ul style="list-style-type: none"> • “Direct costs” does not include market access costs arising from market access restrictions imposed by jurisdictions in response to the Incident. • The jurisdictional legislative instrument (by whatever name) needs to identify the actions/treatments required that are to be undertaken by the Owner.
D	= Replacement value of any capital items destroyed as part of the Response Plan.	<p>Replacement value of any capital items destroyed will depend on what the Response Plan requires and will need to be calculated on an Incident by Incident basis.</p> <p>Replacement value of any capital items destroyed as an unintended consequence of an eradication program need to be included in this element but will not necessarily be specified in the Response Plan.</p> <p>Unintended destruction of capital items will be dealt with on an Owner-by-Owner basis.</p> <p>Replacement values are to be determined in accordance with a schedule of market values for items expected to be destroyed, replacing like with like, and agreed by Relevant Parties at the time of developing a Response Plan.</p>	<ul style="list-style-type: none"> • The legislative instrument (by whatever name) needs to identify items requiring destruction. • Known capital items requiring destruction need to be specified in a Response Plan. • Some items cannot be replaced until the fallow period ends. The price of these items is likely to increase during the fallow period. As such, an appropriate rate of input price inflation must be determined and applied to these prices. Subsequent values are then depreciated. • Capital items could include: <ul style="list-style-type: none"> ○ Harvest bins ○ Irrigation trickle taps ○ Tractors and harvesters

	Definition of elements from the EPPRD	Evidence requirements (<i>in hierarchical order</i>)	Additional information
		<p>Prices will be sourced from local/district suppliers identified at the time of the Incident e.g.:</p> <ul style="list-style-type: none"> • Landmark; • Elders; • Roberts; or • Other regional specialist suppliers identified. 	<ul style="list-style-type: none"> • Replacing 'like with like' means that the Owner is reimbursed for the value of the asset that was destroyed under the Response Plan – it is the cost to replace the same type of item (i.e. same make, model, size etc), and takes into account the age of the item destroyed through a method of depreciation. • If there is an opportunity following the Response Plan for modernising or upgrading the growing facilities – for example, closer Crop plantings, or hydroponics, the level of ORC is to be related strictly to replacing the asset that was there. If an Owner wants to introduce more technology, or better infrastructure, for example, the Owner must cover additional costs.
E	<p>= Loss of profits from a Response Plan requirement to fallow land or keep glasshouses empty.</p> <p>These ORC are only available where the Response Plan requires a fallow period that exceeds ten weeks and are to be restricted to loss of profits for a maximum of three years. Profits are to be based on standardised gross margins data from State/Territory departments of agriculture, based on 'best practice'. However, in some cases, for example where glasshouses are involved, profit estimates may need to be based on documentation of profits from previous years.</p>	<p>Loss of net profits will be determined using one of the following methods:</p> <ol style="list-style-type: none"> 1. Owners auditable records from the 5 most recent prior years of production will be used to estimate future costs and Crop value as appropriate. 2. A standard schedule of regional gross margins based on standard local or regional prices will be used to estimate future costs and Crop value based on best practice. This will be determined by the Lead Agency in consultation with the Australian Melon Association. The assumptions used in developing the gross margins will have to be considered when referring to them (e.g. age of planting, planting density etc). 	<ul style="list-style-type: none"> • Element "E" only applies if a period of bare fallow is required by the Response Plan or if a grower does not have experience/expertise or capital equipment required to grow a suitable and allowable alternative crop (see element F). • The primary goal should be to reduce the costs of the response to all Parties including the Affected Parties. There needs to be a mechanism to enable people to remain productive when there is an incursion. Unless bare fallow is required, it will be assumed that a grower will grow an alternative crop as the first option to remain productive (see framework element "F"). • Owner's auditable records can be verified against industry benchmarking data for some commodities.

	Definition of elements from the EPPRD	Evidence requirements (<i>in hierarchical order</i>)	Additional information
F	<p>= Profits that could be earned from the next best alternative enterprise, produced with the same resources, on the land where the Crop is destroyed and permitted by the Response Plan.</p> <p>Unless the Response Plan requires the land to be fallow, deductions are to be made on the assumption that the Owner chooses the next most profitable enterprise that could be undertaken with existing capital equipment. Gross margins for these alternative enterprises are to be standardised, based on 'best practice' and estimated by State/Territory departments of agriculture.</p> <p>This applies only in the year in which the Crop is destroyed. Where a strict fallow in subsequent years is not required under the Response Plan — that is, any alternative enterprise can be undertaken except production of the Crop concerned in the Response Plan, ORCs are not to include the difference in profits for the Crop in question and any alternative enterprise.</p>	<p>Standardised returns to be estimated for alternative crops relevant to the affected region. An Authorised Person is then to assess each enterprise for the suitability of each relevant crop, including farm records and the experience and equipment normally available to the Owner.</p> <p>Gross margins for alternate crops are to be standardised, based on 'best practice' and estimated by State/Territory Agriculture Departments.</p> <p>Where an Owner has auditable records to support consistent performance for an alternate crop that differs to a regional average then specific reference to an Owner's individual gross margin will be used as appropriate.</p>	<ul style="list-style-type: none"> • Element "F" only applies if the Response Plan allows for an alternative crop to be grown. If bare fallow is required, framework element "F" does not apply. Instead, element "E" applies to the ORC. • The EPPRD assumes that the Owner will choose to run the next most profitable enterprise that could be undertaken with existing capital equipment. However, some requirements are: <ul style="list-style-type: none"> ○ The alternate crop must be a crop the farmer is set up for and confident/experienced to grow. ○ The alternate crop choices will depend on the EPP, host range and persistence in the environment. ○ The alternate crop must not be affected by the EPP or allow it to persist. • Choice of alternate crop will need to be made at the time based on the above requirements, crop cycle, seasonal conditions, EPP and what the Response Plan allows. Recommendations to the Authorised Persons could be made by individuals with agronomic experience in the region and/or the Australian Melon Association.
G	= Value of any stored produce on farm destroyed as a directive of the	This will depend on what the Response Plan requires and will be calculated on an Incident by Incident basis.	<ul style="list-style-type: none"> • Melons may be stored for a short period (generally no longer than a few days) prior to transport.

	Definition of elements from the EPPRD	Evidence requirements (<i>in hierarchical order</i>)	Additional information
	Response Plan – as for annual broadacre Crops.	<p>The amount of any stored produce will be determined by inspection of an Authorised Person at the time of the Incident.</p> <p>Price to be determined using the applicable method as described in "A".</p>	<ul style="list-style-type: none"> • Legal transfer of ownership of Crop will vary with arrangements between an Owner and any intermediary such as an agent or a supermarket.