

# Evidence Framework for Owner Reimbursement Costs for the Grains Industry

Version 1 – 16<sup>th</sup> October 2007



**Appendix 1:** Information requested for ORC development

Formula for calculation of ORCs for Annual Broad Acre Crops from Schedule 6, Part 4.4.11

$$\text{ORC} = (\text{A} - \text{B}) + \text{C} + \text{D} + \text{E} - \text{F} + \text{G}$$

Crop	PHA Member
Grains	Grains Council Australia
Rice	Ricegrowers' Association of Australia
Cotton	Australian Cotton Growers' Research Association

**Requirements for the Grains Industry (Grains Council of Australia)**

	Definition (extracted from the EPPRD)	Evidence requirements/Authorised persons	Comments
<b>A</b>	<p>= Estimated farm gate value of the Crop(s) destroyed which would otherwise have been harvested, where the timing of valuation is normal harvest time.</p> <p>= a * y * p:</p> <p>90% of cereals are wheat and barley. Of this, 80% of the grain at bulk sites is sold at the close of free warehousing. So harvest time (above) is not an appropriate time to take the estimated price.</p> <p><u>Agreed</u> to leave these words and make notes at "p" for each grain type.</p>		
	a = area of Crop destroyed	1. Satellite imagery will be used as the first preference to calculate areas. This will depend on the specific	Jurisdiction legislative order to specify relevant paddock details.

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	<p>jurisdictions capacity to access such information.</p> <ol style="list-style-type: none"> <li>2. Aerial photographs will be used if Satellite imagery is not available. This will depend on the specific jurisdictions capacity to access such information.</li> <li>3. On ground surveys using GPS data if the first two options are not available at the time of incursion and crop destruction.</li> </ol> <p>An on the ground survey will be required to verify the type of crop being grown on the area at the time of the incursion.</p>	
<p>y = estimated yield of the Crop destroyed</p> <p><math display="block">\frac{(\text{regional average yield in year } t * \text{Claimant's yield in year } t-1)}{\text{regional average yield in year } t-1}</math></p> <p>Where the whole district is seriously affected by the pest being eradicated and regional yields are clearly distorted, the yield (y) for the determination of Owner Reimbursement Costs paid by the applicable State/Territory will be taken as the regional average for the five years to year t-1. Yields protected by insurance policies would be protected under this Method of Valuation (to the extent that the Owner is not able to recover under the insurance policy) and any insurance premiums are not to form part of Owner Reimbursement Costs.</p>	<ol style="list-style-type: none"> <li>1. If actual yield cannot be determined by harvesting the crop, expected yield to be assessed by Authorised person by assessment of the prevailing conditions and production in the region, grower records and historical data for the region.</li> <li>2. Where this cannot be reasonably determined, a regional 5 year average will apply.</li> </ol> <p>Regional average yield data to be provided by ABARE on a Local Government area basis.</p>	<p>Average district yield over 5 years is the usual time period to use. In some circumstances, like the recent drought being experienced for the past 6 years, the Parties may decide to take the average over a longer period, for example 10 years</p>
<p>p = estimated farm gate price (local silo cash price less transport costs between farm gate and silo) at the time of harvest. Specifically, the average price for the two calendar months over which the bulk of regional harvest takes place. Where no cash prices are posted, prices are to be taken as the estimated pool</p>	<ol style="list-style-type: none"> <li>1. If there is a contract in place, the contract price will be used.</li> <li>2. If there is no contract, the price will be the cash price determined for each crop type as specified</li> </ol>	<p>Published current season prices vs long term averages</p>

	Definition (extracted from the EPPRD)	Evidence requirements/Authorised persons	Comments
	<p>return for the type and quality of Crop which was destroyed. In the event that an Owner has taken out a forward contract to deliver grain at a specific price, assessment of 'p' is to be based on this contract price rather than the cash silo price. Price is to reflect the quality of product that would otherwise have been delivered. Owners would need to demonstrate quality by way of variety sown and/or recent farm history. In the event of there being no obvious local delivery point where cash prices are posted, the average district price (based on deliveries to closest end users or port) is to be used as the basis for payment.</p>	<p>below:</p> <p><u>Wheat and Barley</u> Cash price at the cessation of free warehousing, with quality determined from previous season's records as held by the usual, verifiable delivery point for that grower.</p> <p>If this is not available, the National Growers Register (NGR) averages or Co-operative Bulk Handling Ltd (CBH) (Western Australia) will be used.</p> <p><u>Sorghum</u> 5 year average cash price provided by the NGR.</p> <p><u>Other grains</u> Local cash price at the usual, verifiable delivery point for that grower.</p> <p><u>Hay</u> Local or regional cash price where available. Evidence of hay production to be based on farm records and certified by an Authorised person.</p> <p>Where an immature crop is destroyed quality is to be estimated based on past grower records of quality (benchmarked against regional performance).</p>	<p>Quality will be benchmarked for the grower (from the previous season's records) against the regional quality for the season of the incursion.</p> <p>Where there is a significant change in local price due to the incursion, the regional average price may be used.</p> <p>Problems like lodging will be taken into account using regional performance for that season.</p>
<b>B</b>	<p>= 'Best practice' harvesting costs plus any other costs normally associated with Crop production between the time of Crop destruction and harvest. Such costs are to be standardised for the</p>	<p>Best practice harvest costs to be estimated using applicable local contract prices or determined by State departments in consultation with the Relevant Parties.</p>	<p>Costs to be determined in accordance with the EPPRD. A standard Schedule of costs will be used to estimate costs based on "best</p>

	<b>Definition (extracted from the EPPRD)</b>	<b>Evidence requirements/Authorised persons</b>	<b>Comments</b>
	region based on estimates by State/Territory departments of agriculture.	Costs to be determined in accordance with the Deed and <i>Appendix 2: Schedule of costs for B – Harvesting costs based on ‘best practice’</i> .	practice”.
<b>C</b>	<p>= Direct costs associated with the Response Plan incurred by the Owner but not normally incurred as a production expense.</p> <p>These costs are actions directed by the Response Plan</p>	<p>This will depend on what the Response Plan requires and will need to be calculated on an Incident by Incident basis with costs estimated using standard local or regional contract prices as appropriate.</p> <p>Costs to be determined in accordance with the Deed and <i>Appendix 3: Schedule of costs for C – “Costs incurred by the Owner under normal operation. These may be affected by the Response Plan and need to be taken into consideration when calculating ORCs”</i>.</p>	<p>Required actions/treatments by Owners need to be specifically defined in a Response Plan.</p> <p>The legislative order needs to specify the actions/treatments required by the Owner.</p>
<b>D</b>	= Replacement value of any capital items destroyed as part of the Response Plan.	<p>This will depend on what the Response Plan requires and will need to be calculated on an Incident by Incident basis.</p> <p>Costs to be determined in accordance with a schedule of market values for items expected to be destroyed, agreed by Affected Parties at the time of developing a Response Plan.</p>	<p>This will be based on the market value of capital items, replacing like with like. Capital items requiring destruction need to be specified in a Response Plan. The legislative order needs to identify the item requiring destruction.</p> <p>This would only be for smaller items that cannot be sufficiently cleaned down.</p> <p>Prices will be sourced from suppliers like Landmark, Elders or other specialist suppliers at the time of the incident.</p>
<b>E</b>	= Loss of profits from fallow land in subsequent years where land is required to be fallowed as part of the Response Plan. Owner Reimbursement Costs are to be restricted to loss of profits for a	Standardised returns to be estimated for crops relevant to the affected region. An Authorised person is then to assess each enterprise for the suitability of each	This will depend on enterprise mix and the area sown to the Affected crop in the incursion season and also the following

	Definition (extracted from the EPPRD)	Evidence requirements/Authorised persons	Comments
	<p>maximum of three years. Methods of estimating loss of profits are the same as for the year in which the Crop is destroyed and include deductions for ground preparation and planting costs normally associated with Crop production. Such costs are to be standardised, based on 'best practice' and estimated by State/Territory departments of agriculture. Any payment of Owner Reimbursement Costs by the applicable State or Territory is to be made after harvest in that region each year.</p>	<p>relevant crop. Where a grower can demonstrate consistent performance above a regional average then higher returns may be paid to that grower.</p> <p>Costs to be determined in accordance with the Deed and <i>Appendix 4: Schedule of costs for E – Loss of net profit from a compulsory fallow</i></p>	<p>seasons.</p> <p>Fallow means where a bare soil is required – i.e. no planting at all.</p>
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. 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. 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, Owner Reimbursement Costs 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 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 grower. Where a grower can demonstrate consistent performance above a regional average then higher returns may be paid to that grower.</p> <p>Examples of gross Margins for crops in specific regions are shown in <i>Appendix 3: Schedule of costs for C – “Costs incurred by the Owner under normal operation. These may be affected by the Response Plan and need to be taken into consideration when calculating ORCs”</i>.</p>	<p>This will depend on enterprise mix and the area sown to the Affected crop in the incursion season and also the following seasons.</p> <p>Choice of alternate crop will need to be made at the time based on crop cycle, seasonal conditions and EPP. Recommendations could be made by Authorised persons with agronomic experience in the region.</p> <p>Gross margins for these alternate crops are to be standardised, based on 'best practice' and estimated by State/Territory departments of agriculture.</p> <p>Core requirements:</p> <p>The crop choice will depend on the pest, host range and longevity in the environment.</p> <p>The crop plant must not be affected by the pest or allow it to persist.</p> <p>The alternate crop must be a crop the farmer</p>

	Definition (extracted from the EPPRD)	Evidence requirements/Authorised persons	Comments
			<p>is set up and confident / experienced to grow.</p> <p>The EPPRD assumes that the Owner will choose to run the next most profitable enterprise that could be undertaken with existing capital equipment.</p>
<b>G</b>	<p>= Value of any stored grain or other produce on-farm destroyed as part of the Response Plan. The value is to be in-silo value based on local market values less transport and handling costs at the time of destruction of the stored grain.</p> <p>Value is the value of the destroyed crop, therefore the cash price on the day of destruction (or day of response plan)</p> <p>Where a Crop has to be destroyed shortly after planting and there is a reasonable opportunity to plant an alternative Crop, the Owner may choose to be reimbursed for the costs of destroying the Affected Crop and planting the alternative Crop. Otherwise, the above formula will apply.</p>	<p>This will depend on what the Response Plan requires and will be calculated on an Incident by Incident basis.</p> <p>Price and yield to be determined using the applicable method as described in "A".</p>	<p>Can be established by infrastructure and actual amounts of grain on farm at the time.</p>

*Appendix 2: Schedule of costs for B – Harvesting costs based on ‘best practice’.*

NOTE: These costs are estimates as at July 2006. In the event of an incursion where Owner Reimbursement Costs may be paid, the costs and values will be reviewed and updated by agreement of the Relevant Parties to allow current and case specific information to be used.

Grains Council of Australia have been requested to supply this information. It was not costed out separately in the Gross Margins supplied by DAFWA

<b>Cost</b>	<b>Rationale</b>	<b>Rate</b>	<b>Comments</b>

Appendix 3: Schedule of costs for C – “Costs incurred by the Owner under normal operation. These may be affected by the Response Plan and need to be taken into consideration when calculating ORCs”.

Those operations and costs imposed by the response plan will be added at the time of Response Plan development.

NOTE: These costs are estimates as at July 2006. In the event of an incursion where Owner Reimbursement Costs may be paid, the costs and values will be reviewed and updated by agreement of the Relevant Parties to allow current and case specific information to be used.

*WHEAT – from DAFWA– Boothendarra Region Western Australia*

<b>Cost</b>	<b>Rationale</b>	<b>Rate</b>	<b>Comments</b>
Seed/seed treatment		60 kg/ha @\$175.00 /tonne = \$10.50/ha	
Fertiliser: Agras (CuZnMo)		100 kg/ha @\$433.00 /tonne = \$43.30/ha	
Urea		70 kg/ha @\$355.00 /tonne = \$24.85/ha	
Fertiliser cartage		\$2.04	
Sprays:		Average cost of chemicals = \$44.00	
Plant and machinery:		Average fuel/oil cost = \$12.00 Average cost of repairs = \$21.00	
Contractor:		Average cost of contractor for this crop = \$0.00	
Casual labour:		Cost of casual labour per ha cropping program = \$5.00	
Crop insurance:		0.95% of budgeted proceeds = \$3.25	

Interest:		10% rate on variable costs for 6 months = \$8.30	
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BARLEY – from DAFWA– Boothendarra Region Western Australia

Cost	Rationale	Rate	Comments
Seed/seed treatment		50 kg/ha @\$160.00 /tonne = \$8.00/ha	
Fertiliser: Agstar		100 kg/ha @\$407.00 /tonne = \$40.70/ha	
Urea		50 kg/ha @\$255.00 /tonne = \$12.75/ha	
Fertiliser cartage		\$2.04	
Sprays:		Average cost of chemicals = \$44.00	
Plant and machinery:		Average fuel/oil cost = \$12.00 Average cost of repairs = \$21.00	
Contractor:		Average cost of contractor for this crop = \$0.00	
Casual labour:		Cost of casual labour per ha cropping program = \$5.00	
Crop insurance:		0.95% of budgeted proceeds = \$3.19	
Interest:		10% rate on variable costs for 6 months = \$7.42	

CANOLA – from DAFWA – Boothendarra Region Western Australia

Cost	Rationale	Rate	Comments
Seed/seed treatment		6 kg/ha @\$285.00 /tonne = \$1.71/ha	
Fertiliser: Agstar Plus		150 kg/ha @\$439.00 /tonne = \$65.85/ha	
Urea		100 kg/ha @\$255.00 /tonne = \$25.50/ha	
Fertiliser cartage		\$3.00	
Sprays:		Average cost of chemicals = \$58.00	
Plant and machinery:		Average fuel/oil cost = \$15.00 Average cost of repairs = \$22.00	
Contractor:		Average cost of contractor for this crop (e.g. swathing, spraying)= \$25.00	
Casual labour:		Cost of casual labour per ha cropping program = \$5.00	
Crop insurance:		1.00% of budgeted proceeds = \$3.86	
Interest:		10% rate on variable costs for 6 months = \$11.25	

FIELD PEAS (Pulses example) – from DAFWA – Northam District, Western Australia

Cost	Rationale	Rate	Comments
Seed		80 kg/ha @\$154.00 /tonne = \$12.32/ha	
Fertiliser: Mega Phos		75 kg/ha @\$333.00 /tonne at works = \$24.8/ha	
MOP		25 kg/ha @\$400.00 /tonne at works = \$10.00/ha	
Fertiliser cartage		\$15/tonne = \$1.50/ha	
Application		2 applications @ \$3.00/ha = \$6.00/ha	
Sprays: Roundup		0.8L/ha @ \$5.61/L = \$4.49/ha	
Spray seed		1L/ha@ \$5.61/L = \$4.49	
Ester		<u>0.1L/ha@\$9.46/L</u> = \$0.95/ha	
Diuron		<u>1.5l/ha@\$14.25/L</u> = \$21.38/ha	
Scud		<u>0.2L/ha@\$13.75/L</u> = \$2.75	
Chlorpyrifos		<u>0.2L/ha@\$10.75/L</u> = \$2.15	
Applications		3 applications @ \$3.00/ha = \$9.00	
Plant and machinery:		Harvest = \$18.00/ha Seeding = \$13.00/ha	

Contractor:		Grain cartage, swathing, harvesting = \$0.00	
Casual labour:		Cost of casual labour seeding/harvest 12 weeks @ \$750/week over 2000ha = \$4.50/ha	
Crop insurance:		Fire and hail 1.26t/ha@ 1% = \$2.95	
Interest:		9% rate on variable costs for 6 months = \$6.51	

*Operations required by the Response Plan*

<b>Cost</b>	<b>Rationale</b>	<b>Rate</b>	<b>Comments</b>

*Appendix 4: Schedule of costs for E – Loss of net profit from a compulsory fallow*

NOTE: These costs are estimates as at July 2006. In the event of an incursion where Owner Reimbursement Costs may be paid, the costs and values will be reviewed and updated by agreement of the Relevant Parties to allow current and case specific information to be used.

*This table will be filled in at the time of the incursion as the incursion could be in a wide variety of crops and the fallow time will specifically relate to the EPP.*

<b>Cost</b>	<b>Rationale</b>	<b>Rate</b>	<b>Comments</b>