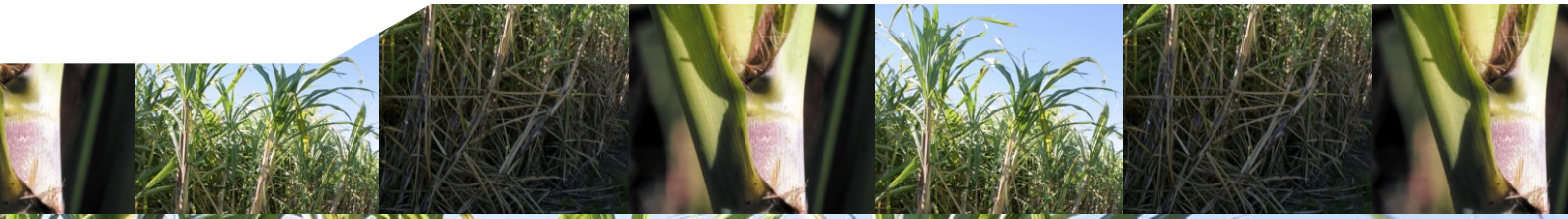
Evidence Framework for Owner Reimbursement Costs for the Sugarcane Industry

Version 1 – 16th October 2007



Appendix 1: Information requested for ORC development

Principle – average for the year of destruction (price) will be estimated from the current years price. The longer term average (over 5 years) will be made from the current years estimate plus the previous 4 years price (1+4)

Formula for calculation of ORCs for Broad Acre Perennial Crops from Schedule 6, Part 4.4.14

ORC = (A - H) + B + C + D + E + F + G

Crop	PHA Member
Sugar	CANEGROWERS
Pineapples	Growcom

Requirements for the Sugar Industry (CANEGROWERS)

	Definition	Evidence requirements	Comments
A	= Value of the Crop destroyed = a * y * p where:		
	a = Area of Crop destroyed.	The jurisdictional legislative order (by whatever name) will identify the quarantine zone, and the Lead Agency must hold appropriate records of the area of crop Affected. The area is to be certified by an authorised person.	The jurisdictional legislative order needs to include: grower name, block number, area, variety and crop class. In QLD this will be the inspectors direction under the Plant Protection Act. See also items C and F for information to be included in the order.

	Definition	Evidence requirements	Comments
	y = Yield which depends on the type of Crop destroyed — for sugar, for example, whether it is a plant Crop or ratoon Crop as yields vary from year to year. For this reason, yield *y* is to be based on distinct average yields for the type of Crop destroyed — for example, ratoon or plant Crop.	Yield* estimated according to farm history of relative tonnage and CCS and mill-area history of relative variety performance. 1. Regional (PQA) average yields (5 year average) for the particular variety provided by BSES; or 2. If grower specific information is required this will be the applicable mill estimate, based on supporting documentation of production history and relative farm performance, or 3. A mill district average, or 4. For new crops, regional estimates as per **Error! Reference source not found.**, or 5. For the first year of a new variety, estimates determined by benchmarking against other varieties, provided by BSES. Where a Crop is owned by a mill, the data will be obtained by authorised persons and audited by the Lead Agency by a process agreed by the Affected Parties.	* Mass and CCS Basis of estimates to be fully detailed.

	Definition	Evidence requirements	Comments
	p = Market price of the product. = The average regional market price over the previous 12 months valued at farm gate.	The price of sugar applicable to a given season and to all growers will be determined in the following way, depending upon the date at which the price must be determined: • **Up to and including 30 June**. The price for the current crop (if destroyed) would be the average price over the previous 12 months. • **1 July and thereafter**. The price for the current crop (if destroyed) would be the Queensland Sugar Ltd estimate. If this is unavailable the Affected Parties will agree on the closest equivalent source. • **Forward price** (when calculating losses from crops beyond the current season). The 5 year average price (including the current season, determined as above, and the previous 4 seasons. However, if a contract is in place that specifies a price, this will be used.	*The Forward price will also be used for B, D and E.*
B	= Any costs of Crop destruction 'depreciated' in the same way as for perennial tree Crops.	Where the grower destroys the crop: 1. Costs to be determined in accordance with the Deed and *Appendix 2: Schedule of costs for B – Crop destruction costs 'depreciated'*.	The 'normal' crop cycle for each PQA will be used. Typically this is a plant crop followed by four ratoon crops.
C	= Any other costs incurred by the Owner as a direct result of the Response Plan and not normally incurred as a production cost.	The jurisdictional legislative order (by whatever name) identifying the treatment/s required by the Owner on the Affected Crop, plus 1. Costs to be determined in accordance with the Deed and *Appendix 3: Schedule of costs for C – Any other direct costs incurred by the Owner under the Response Plan*.	Required actions/treatments by Owners need to be specifically defined in a Response Plan. The legislative order needs to specify the actions/treatments required by the Owner.
D	= 'Depreciated' Crop replanting costs as for perennial tree Crops.	1. Costs to be determined in accordance with the Deed and *Appendix 4: Schedule of costs for D – Crop replanting costs 'depreciated'*.	

	Definition	Evidence requirements	Comments
E	= Loss of net profit from compulsory fallow, where fallow would not normally be part of the rotation cycle. Net profit to be standardised and based on regional gross margin estimates by State/Territory departments of agriculture averaged over the rotation cycle. A maximum of three years fallow is to be included.	1. Costs to be determined in accordance with the Deed, best practice as defined by BSES and *Appendix 5: Schedule of costs for E – Loss of net profit from compulsory fallow*.	It will be assumed that: ▪ a grower will grow a fallow crop; ▪ the normal fallow crop is grown; ▪ if a fallow is not required by the Response Plan, E does not apply to ORC.
F	= Replacement value of any capital items destroyed as part of the Response Plan.	Destruction of capital items to be certified by an approved person, plus 1. 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.	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.
G	= Value of any stored produce on farm destroyed as a directive of the Response Plan — as for annual broadacre Crops.	As appropriate.	Sugarcane is not stored as part of the production cycle of converting sugarcane into raw sugar. However some by-product may be stored.

	Definition	Evidence requirements	Comments
H	'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 region based on estimates by State/Territory departments of agriculture.	Costs to be determined in accordance with the Deed, best practice as defined by BSES, and by selecting the relevant costs as indicated in *Appendix 5: Schedule of costs for E – Loss of net profit from compulsory fallow*.	Item H was added with agreement of the Relevant Parties, as it was agreed that this was unintentionally omitted from the EPPRD.

with such costs and values being determined in accordance with guidelines issued by Plant Health Australia as set out in Schedule 17.

Appendix 2: Schedule of costs for B – Crop destruction costs 'depreciated'

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.

The recommended practice for cane crop destruction consists of an application of herbicide (eg. glyphosate) spray to young stool regrowth approximately 4 to 6 weeks after harvest.

Cost	Rationale	Rate	Comments
Destruction cost	*Chemical Costs* herbicide applied at 8 litres/ha, costing $9 per litre *Application Costs* Estimated external contract rate	*Chemical Costs* for crop destruction: $70/ha *Application Costs* $30/ha Total destruction cost: $100/ha	The recommended rate (ranging from 6 to 9 litres/ha) of glyphosate. The approximate cost is $140 to $200 per 20 litre drum (depending on brand, concentrate of active constituent, and retailer/distributor).
Volunteer control			Note this would be highly dependent on subsequent land management decisions undertaken by the farmer, eg, either bare fallow or planting of a legume rotational crop.

Appendix 3: Schedule of costs for C – Any other direct costs incurred by the Owner under the Response Plan

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.

NOTE also that this schedule in particular is specific to sugarcane smut.

It is recommended that cane farmers use on-farm hygiene practices as dictated by best practice management (to avoid Ratoon Stunting Disease). This is a normal cost of production and not covered by Owner Reimbursement Costs.

In some circumstances additional costs could be incurred by harvesters, the majority of which are operated by outside contractors. As contract harvesters are not covered by the Deed they are not eligible for Owner Reimbursement Costs.

Where costs are passed to a grower by a contractor as a direct result of the requirements of a Response Plan, appropriate taxation documentation identifying treatments as specified in the legislative order would be needed as evidence of costs incurred.

Cost	Rationale	Rate	Comments
Burning cane	For 1 block of cane (approx. 3 ha): 3 staff, for 1.5 hours each, @$30 per hour = $135/block	$45/ha	
Extra fertiliser following burning			Due to the loss of trash (organic matter and nutrients through burning), there may be need for increased levels of fertiliser application
Extra cultivation			
Extra water			Due to the loss of trash (organic matter acting as a mulch on subsequent crops), there may be need for increased levels of water application.

Appendix 4: Schedule of costs for D – Crop replanting costs 'depreciated'

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.

NOTE also that the practices stated here will in particular need to be reviewed. For example, the need for Suscon may vary on a sub-regional basis.

The costs outlined below relate only to direct planting costs (and do not incorporate subsequent crop management activities eg. fertiliser and water).

Cost	Rationale	Rate	Comments
Land preparation costs		$175/ha	Conventional practice is a rip, disc and rotary hoe. Note that these costs may vary considerably, dependent upon the type and amount of land preparation practices undertaken beforehand (in preparing the preceding legume crop/if legume cropping undertaken), condition of the soil, amount of organic matter present, type of soil.
Planting		$350/ha	
Fertiliser		$120/ha	A recommended application of fertiliser is 20 units of P, and 40 units of K at planting following a legume crop rotation. An example is 200kg of CK1 @$600/t. Note this fertiliser application rate is highly dependent on a preceding fallow, legume rotation, and the condition and fertility of the soil, and subsequent management.
Pesticide		$259/ha	Suscon to control cane grub. Not all properties require this. On average, 50% of replanted area requires this application at time of planting. The need for treatment to be determined on a case by case basis by an authorised person taking into account documented farm history and prevailing conditions.
Seed cane	Best practice projects a planting rate of 8t cane/ha Estimated cost of $49.00/t for plant	$392/ha	Dependent on soil type, and land management practices, cane plant rates may vary from 6 to 10t per ha. Seed cost may increase substantially if local demand

	cane in 2006/07.		exceeds local supply and if cane planting stock is transported long distances.

Appendix 5: Schedule of costs for E – Loss of net profit from 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.

These costs and practices will vary on a regional (i.e. PQA) basis. BSES will define best practice (see evidence requirement for 'E' above).

Cost	Rationale	Rate	Comments
Costs avoided as a consequence of an enforced and unscheduled fallow			
Harvesting Costs	$6.75 per tonne, plus an allowance of $0.25 per tonne towards harvester cost for disinfecting	$609/ha	
Water Charges	$28.30/ML (Part B) 2.5 ML/ha Electricity $137.50/ha	$208/ha	
Fertiliser	650kg/ha NPK compound fertiliser at $600/t	$422/ha	
Chemicals	2,4-D Amine (2 Applications @ 2.6L/ha) $32.86 Velpar (1 application @3.5kg/ha) $81.13 Gramoxone (1 application @ 1.3L/ha) $11.31 Costs of applications 3 applications @$15	$170/ha	The application of Velpar & Gramoxone undertaken the same time, while 2 additional applications are required for each of the 2,4-D Amine (total of 3 spraying applications by farmer)
Levies		*=$0.6*87=$52/ha (approximate)*	
Total		*$1461/ha*	
Gross revenue forgone as a consequence of an enforced and unscheduled fallow			
2006/07	87 tonnes/ha @ $38.97/t cane	$3 390/ha	
Net revenue forgone	$3 390 - $1461 =	$1 929	
Average income from soybean rotation crop			

Income	Yield: 4 tonnes/ha Price: $300 tonne	$1 200/ha	(yield ranges from 3 to 5 tonnes ha) (price $400 + per tonne for high quality)
Average costs from soybean rotation crop			
Land Preparation		$100/ha	
Seed		$100/ha	
Planting cost		$70/ha	
Fertiliser	Recommend 50untis K, 10 units P and 20 units N	$75/ha	Fertiliser cost $600/t, applied at 125kg/ha
Weed control		$130/ha	
Irrigation	2ML	$165/ha	
Harvest costs		$115/ha	
Total growing costs		*$755/ha*	
Net Gross margin from soybean rotation crop			
	$1 200 - $755 =	$445/ha	
Net loss of profit as a consequence of an enforced and unscheduled fallow			
	$1,929 ha (net sugar) less $445 (net soybeans) =	$1,484/ha	