GIWA Grain Standards – Discussion Paper
NOTE: THIS PAPER WAS DEVELOPED IN 2010 WITH UPDATES HIGHLIGHTED IN BLUE

<table>
<thead>
<tr>
<th>Commodity:</th>
<th>Barley</th>
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<tr>
<th>Delivery Standard or Grade to be reviewed.</th>
<th>Malt 1 &amp; Malt 2 grade</th>
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<tr>
<th>Issue: Proposed changes for adoption.</th>
<th>Hectolitre weight</th>
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<tbody>
<tr>
<td>Current WA standard: Malt 1 = 64.0 kg/hl Malt 2 = 62.0 kg/hl</td>
<td>Proposed GTA standard: Malt 1 = 65.0 kg/hl Malt 2 = 63.0 kg/hl</td>
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| Technical basis of the issue: (Background information) | Hectolitre weight is a measure of grain sample density which can be an indicator of pre-harvest sprouting adversely affecting the grain. High hectolitre barley samples indicate sound grain which performs well in the malting process. |

| Quantification of the issue: (How does it affect the WA grain industry?) | The lifting of minimum hectolitre weight in malting barley from 64 to 65 will have implications of relegating tonnages of previously malt grade grain to feed. To assess the industry impact of this change industry supplied data by port zone over the past 3 seasons is graphically represented below in Chart One: |

![Malt barley tonnages between 64 and 65 hL weight](chart.png)
From this data it appears that port zones 1 and 2 would on average have approximately 20,000 to 30,000 tonnes of grain annually affected by this standard change. Note that the port zones 1 and 2 have significant tonnages of grain between the 64 and 65 kg/hL weight ranges in the 2009 year (2008 season). This is related to the wet harvest conditions which induced preharvest sprouting and hence reduced sample hectolitre weights.

2012 Update
Analysis of data used for the 2012 review on screenings would suggest that the correlation between screenings and hectolitre weight is very small. The data suggests that shift to a tighter screenings level has at the most the ability to increase the average Hectolitre Weight of a stack by 0.5 (eg 66.0 could go to 66.5 in years with high screenings). This supports the view that this attribute needs to be reviewed separately to screenings at a shift in screenings will not fix the low hectolitre weights.

Chart Two

![Malt 1 Kg/ml by Port Zone](chart.png)

As can be seen by the Chart One above the target of 67 kg/ml for export contracts is often below the Port Zone weighted average and hence it is not possible to get every shipment to meet the target.

It is worth noting from the Chart Two above that the two seasons with the tight finish (2009/10 and 2010/11) have the better average hectolitre weight. The lower Hectolitre weights in the seasons with the wet finish may be indicating that some sprouting of seed has been occurring.
### Industry stakeholders affected:

1. How may the change affect the grower?
   - Potential to have a portion of malt barley downgraded to feed.

2. How may the change affect the industry?
   - The ability to have a uniform standard for national trading
   - **Lifting the hectolitre weight helps to improve the Marketability of the WA Malt 1 barley stack**

### Industry feedback / comment:

**Marketer:**
Support an increase to 65, to enable the trade to meet international standard which is typically greater than 67.0 kg/hl.

**End user:**
Higher hectolitre weight produces better malt. WA grain will potentially be 1 kg/hl lower grain from the rest of Australia.

**Barley Australia:**
We appreciate that differences have existed in the past because of differences in the incidences of weed seeds and contaminants, and because of slight differences in buyer expectations relating to protein, screenings, test weight and variety.

However, in a deregulated market, the advantages of being able to trade against an Australian barley standard are obvious, and would ensure that complications relating to adherence to barley standards by both buyers and sellers. would be removed in the future.
For an overall economic impact the total tonnes affected over the past 3 seasons need to be considered. This is summarised in the table below:

<table>
<thead>
<tr>
<th>Season</th>
<th>Tonnes received at &lt;65 kg/hL</th>
<th>Percentage of malt crop</th>
<th>Loss in value to growers at $45/ton</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>113,967</td>
<td>15%</td>
<td>$5,128,502</td>
</tr>
<tr>
<td>2009</td>
<td>188,761</td>
<td>12%</td>
<td>$8,494,248</td>
</tr>
<tr>
<td>2008</td>
<td>25,796</td>
<td>3%</td>
<td>$1,160,811</td>
</tr>
<tr>
<td>Average</td>
<td>109,508</td>
<td>10%</td>
<td>$4,927,853</td>
</tr>
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Although seasonally fluctuating, it appears that on average approximately 10% of WA’s current malt barley crop would be downgraded to feed under this proposed standard. At an average malt/feed spread of $45/tonne this represents a value loss of close to $5 million to the WA grains industry. This value loss would be borne by the 3812 WA barley growers (ABS 2005) representing an individual average income loss of $1293 each. The averaging of this figure may be slightly misleading as it can be noted from the graph previously that port zones 1 and 2 have greater tonnages affected by this standard change than other regions of the state.

With this information at hand it is difficult to argue the need for this standard change.

A situation where this standard change may need to be revisited would be if CBH was finding that their stack averages are not high enough to provide acquirers with the specified outturn hectolitre weight. This does appear to be an issue going by the data reviewed in 2012.

Options going forward:
- Change as per proposed
- Malt 1 Hectolitre Weight of 65.0 be adopted in 2013/14, Malt 2 Hectolitre weight remain unchanged so that Malt Barley varieties are not lost into the feed stack.
- No Change

Proposed year of adoption: 2013/14

Require further information? Contact:
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