



**Certification Audit Report  
For Manildra Group of Companies,  
Shoalhaven Starches Pty Ltd  
BOMADERRY NSW 2541  
On: 19-21 December 2011**

This report is prepared by representatives of NCS International in relation to the above-named client's conformance to the nominated standard(s), and is relevant only to the scope of business sites and activities defined in the 'Scope of Certification'. Audits are undertaken using a sampling process, and the report and its recommendations are reflective only of activities and records sighted during this audit process. NCS International shall not be liable for loss or damage caused to, or actions taken by, third parties as a consequence of reliance on the information contained within this report or its accompanying documentation.

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## AUDIT PUBLIC SUMMARY

### Purpose and Scope of the Audit:

This audit was a certification audit of Manildra Group of Companies, Shoalhaven Starches ethanol facility, against the RSB Certification System.

The purpose of this audit was to:

- ensure the ongoing compliance of the organisation against the Roundtable on Sustainable Biofuels (RSB) Principles and Criteria RSB-STD-01-001 [Version 2] and the organisation's procedures required of a Biofuel Producer
- assess the effectiveness of the organisation's procedures and management systems in providing improved management, compliance and the overall organisation performance.

The scope of the audit included a review of Shoalhaven Starches biofuel (ethanol) production from waste starch originating from wheat processing, against the RSB Principles and Criteria (RSB) RSB-STD-01-001 (Version 2) RSB requirements as detailed in the certification audit program dated 1 December 2011 and Revised 14 December 2011. The Participating Operator is classified as a Biofuel Producer.

The scope of the GHG assessment considered waste starch and grain sorghum as inputs into the Ethanol Plant production process, the Energy, Chemicals and Water use as part of the production process and transportation (raw material and finished product), excluding embodied emissions in construction materials. Outputs include Fuel Grade Ethanol with co-products being Industrial Grade Ethanol, Liquid CO<sub>2</sub>, and Stillage

This assessment did not verify the percentage of waste starch in the wastewater feedstock into the Ethanol Plant.

There were no issues identified that were considered difficult or impossible to evaluate.

### Recommendation:

- The management system has been implemented effectively and complies with the requirements of the nominated RSB Standard.
- The management system has been implemented effectively and complies with the requirements of the nominated RSB Standard subject to rectification of all category 'C' nonconformities raised in this report.
- The management system has not been implemented effectively and/or does not comply with the requirements of the nominated RSB Standard.

### Response & Date required:

A number of observations were noted, no formal action is required but opportunities for improvement should be reviewed.

A number of minor non-conformances were identified. An action plan to address each non-conformity recorded in the report is required within one month. The details provided should address the cause of the issue, the short term rectification action and the long term corrective action to be taken to prevent recurrence and the timeframe involved. This assessment did not require suspending or re-scheduling of the RSB audit.

Please provide responses by either inserting details under the relevant finding, or forwarding a separate action plan.

### Sites Audited

<b>Site Audited</b>	<b>Audit Date</b>	<b>Auditors</b>
BOMADERRY NSW 2541	19-20 Dec 2011	Mick Berry (International Lead Auditor/ Team Leader) Sue Trahair (Local Auditor) Liviu Amariei (Observer [Accreditation Witness Auditor] - RSB) Michal Brink (Observer [Accreditation Witness Auditor] – RSB)
Head Office, Auburn NSW	21 Dec 2011	Mick Berry and Sue Trahair

**Report presented to and received by**

Name: John Studdert  
Position: Quality Assurance and Environment Coordinator  
Date: 23 December 2011

## EXECUTIVE SUMMARY

### Assessment Outcome

This was a certification assessment of the Participating Operator (PO) Shoalhaven Starch Pty Ltd (SS) facility at Bomaderry, NSW, Australia. SS produces ethanol from waste starch from wheat processing.

Management and staff demonstrated a strong commitment in the development and implementation of their RSB Environmental and Social Management Plan and RSB Systems Procedures to meet the requirements of the Roundtable on Sustainable Biofuels (RSB) Certification Systems and Standards, specifically, the RSB Principles and Criteria RSB-STD-01-001. Responsibilities for the ongoing implementation and maintenance of the RSB system have been defined.

The Environmental and Social Impact Assessments (ESIA) conducted took the form of an Environmental Assessment (EA) as part of the Ethanol Production Upgrade Project in 2008 and required under the *Environmental Planning and Assessment Act (EPAA) 1979* and the *Environmental Planning and Assessment Regulation 2000*

A review of the EA determined that it was equivalent to, or it exceeded the RSB ESIA requirements. Further the EA required the development and implementation of a number of individual environmental management plans such as the Landscape and Vegetation Management Plan, Odour Management Plan, Water Saving Action Plan, Wastewater Management Plan etc.

The EA required public participation as part of the impact assessment process and this was completed by an independent local consultant. This process identified a range of issues with the key issue being odour emissions from the Factory and Environmental Farm. The company has implemented a number of odour reduction initiatives including the construction of a Water Treatment Plant (WTP) and modifications to Dried Distillers Grains (DDG) storage.

The WTP includes anaerobic and aerobic digestion facilities, microfiltration and reverse osmosis to meet the factory's operational and volumetric capacity.

The WTP generates water of a quality that can be re-used in the Factory providing significant water efficiency savings. Similarly, it has reduced the volume and improved the quality of waste waters irrigated on the Environmental Farm thus reducing the potential for odour emissions.

The assessment of Greenhouse Gas (GHG) Emissions was undertaken using actual data from production with consideration of RSB's Standard RSB-STD-POL-01-001 V1.0 RSB Policy for certification of biofuels based on end of life products and wastewater.

The assessment determined that GHG Emissions from SS Biofuel operations were in compliance with Criterion 3, which requires Participating Operators, in this case SS, to contribute to climate change mitigation, specifically the production of fuel grade ethanol, which has the potential to significantly reducing comparative GHG lifecycle emissions.

We note that Criterion 3a was not applicable to SS as Biofuel legislation in Australia does not require the life cycle greenhouse gas (GHG) emissions to be assessed. There is also no legislative requirement in Australia for biofuel producers to have lower GHG emissions than fossil fuel derived petrol and diesel. Further, in accordance with RSB Principles and Criteria RSB-STD-01-001, Biofuel Producers, in this case SS, are not required to meet RSB Criterion 3c *"Biofuel Blends shall have on average 50% lower lifecycle greenhouse gas emissions relative to the fossil fuel baseline. Each biofuel in the blend shall have lower lifecycle GHG Emissions than the fossil fuel baseline"*.

The use of waste starch, with zero emissions, is a key input into the GHG calculations. The scope of this assessment did not, nor was required to verify the quantity of waste starch in the wastewater as defined by the RSB Policy for certification of biofuels based on end-of-life-products and wastewater RSB-POL-01-001, Version 1.0. This infers that wastewater could contain a mix of RSB certified/compliant product and RSB non-certified/compliant product in accordance with RSB-STD-20-001 V2 Generic Chain of Custody Standard.

Stakeholder's consultation was also conducted by NCS International as the certification body prior to this assessment to seek input from persons in relation to SS biofuel operations and RSB requirements. The comments/ issues identified and responses are detailed on page 6 of this report.

It was determined as part of this assessment that Principle 5 and Principle 6 did not apply to SS since biofuel operations do not occur within a region of poverty or food insecurity. Further Principle 8 only applies to PO's that are Feedstock Producers, which SS is not.

### Summary of non-conformities identified:

No major non-conformities or 'Conditions' for certification were identified as part of this assessment, however the following minor non-conformities were detected as part of the sampling process. *Note: Minor non-conformities require an action plan and do not preclude certification:*

1. WorkCover Notification of Dangerous Goods does not accurately reflect site dangerous goods depots and chemical storage areas. *Principle 1, Criteria 1, RSB Principles and Criteria*
2. Non-compliances relating to requirement of the Environmental Protection Licence (EPL) PL 883 principally relating to pH and temperature through monitoring points 1 and 3. *Principle 1, Criterion 1, RSB Principles and Criteria*
3. Failure to communicate publically the 24 hour complaints line as required under EPL 883. *Principle 2, Criterion 2a, RSB Principles and Criteria*
4. Calibration certificates were not available for temperature gauges on the cooling water discharge points 1 & 3. *Principle 1, Criterion 1, RSB Principles and Criteria*
5. Near miss safety incidents identified as part of this assessment *Principle 4, Criterion 4f, RSB Principles and Criteria*
6. The inclusion of stakeholder engagement specifically in a proactive way to ensure effective monitoring of issues that are considered locally, regionally and globally occurs. *Principle 2, Criterion 2a, RSB Principles and Criteria*
7. Chemical handling, storage, and disposal of biofuels and chemicals on site. *Principle 11, Criterion 11d, RSB Principles and Criteria*

### Close Out of Previous Non-Conformances:

Not applicable since this is the first assessment.

### Self-Evaluation Alignment with NCSI Assessment:

NCS International has reviewed the self-evaluation submitted by the Participating Operator SS with consideration of documentation submitted and the on-site visit and considered that it accurate, within a 10% tolerance. Therefore the Risk Class determined will be reduced by 0.5 Risk Classes with a final Risk Class of 1. Further, the Self Risk Assessment completed by SS and evaluated by NCSI did not deviate by more than 1 Risk Class and therefore the evaluation was not suspended or conducted anew.

## FEEDBACK

NCSI values your feedback on the performance of our auditors and your overall experience of the certification process.

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## NEXT AUDIT:

Desktop audit in December 2012 (*Note: This is subject to alteration should the clients scope of activities or Risk Class change*). Further, NSW Legislation is currently under review with the responsible agency being the Office of Biofuels. Changes to this Legislation may impact on the applicability of Criterion 3a and the need for further assessment or review.

Topics, business units etc to be covered: Full assessment against the requirements of the RSB

## Capability statement

(Include site name, address, and brief description of activities within the audit scope at each site)	No. of Certificates required
Manildra group of Companies, Shoalhaven Starches Pty Limited 160 Bolong Road BOMADERRY NSW 2541	
<b>Capability Statement:</b>	
Biofuel (ethanol) production from waste starch originating from wheat processing Participating Operator is defined as; a Biofuel Producer.	5 Certificates Use RSB Template
<b>Participating Operator Code:</b> 00001	
Risk Class Determined for Participating Operator: 1	
Certificate Expiry Date: Validity of 2 years	

## RECORD OF STAKEHOLDER COMMENTS AND INTERVIEWS

Comment/ Issue Raised	Response
Odour from the site was 'quite bad' however the company has worked with neighbours over the last few years to address this issue. [RSB Criterion 1]	Nil required
There was a bad smell from the site and now there is only an occasional smell. There is also noise from the trains because they were going too slow but this has been addressed. [RSB Criterion 1]	Nil required
Feedstock for Ethanol manufacture is from starch and grain, not waste starch. [RSB Criterion 3b]	The on-site assessment confirmed the use of wastewater as the only input into the Ethanol Plant. The classification of the material inputs are in accordance with <i>RSB-STD-POL-01-001 V1.0 RSB Policy for certification of biofuels based on end of life products and wastewater</i> .  Further the allocation of emissions to co-products is on an economic basis.

Comment/ Issue Raised	Response
<p>Greenhouse Gas Emissions are underestimated based on the definition of waste feedstock.[RSB Criterion 3b]</p>	<p>This GHG assessment included a review of actual data and assessed raw materials inputs; the classification of raw materials and allocation of emissions to co-products based on an economic basis in line with RSB requirements and considers in particular <i>RSB-STD-POL-01-001 V1.0 RSB Policy for certification of biofuels based on end of life products and wastewater</i>.</p> <p>Previously public information like the 2008 GHG Assessment conducted for the ethanol plant upgrade used estimated projections. This is somewhat obsolete information given the availability of actuals.</p> <p>Note: It is possible the feedstock into the Ethanol Plant could contain a mix of waste or RSB compliant product and non-waste or RSB non-compliant product. The percentage of certified/compliant product versus non-certified/non-compliant product is outside the scope of this assessment but could be verified as part of a Chain of Custody assessment to RSB-STD-20-001.</p>
<p>Greenhouse Gas Assessment in 2008 used unverified information [RSB Criterion: N/A]</p>	<p>This is standard procedure for an Environmental Assessment prepared prior to a plant being built i.e. all production information for the EA supplied by SS was based on projections and not verified. The RSB certification assessment was based on actual data.</p>
<p>No ethanol produced would comply with US GHG Standards. [RSB Criterion 3c] (at least 50% lower in emissions of diesel or petrol).</p>	<p>The RSB standard potentially provides for chain of custody certification across the entire supply chain from feedstock production, feedstock processing, biofuel production through to biofuel blending and distribution.</p> <p>The RSB criterion specifies 50% lower life cycle emissions relative to fossil fuel at the blended stage</p> <p>The RSB standard classifies SS as a biofuel producer, not a blender, ie SS provide ethanol as an input, (amongst other processors) in blended fuel. As such, SS are not required to meet the 50% life cycle emission requirement.</p>

Comment/ Issue Raised	Response
RSB defines waste as having no value while [RSB-POL-01-001 V1] high quality starch is definitely a saleable product.	The definition of waste is determined in accordance with <i>RSB-STD-POL-01-001 V1.0 RSB Policy for certification of biofuels based on end of life products and wastewater</i> . The stakeholder has claimed: 'RSB defines waste as having no value'. This definition is not used by the RSB. The ethanol plant processes waste streams from the production of high quality starch which meets the RSB definition.
Ethanol subsidy by government to MGC and E10 mandate changes the production priorities of starch and ethanol products. [RSB Criterion: N/A]	Implications of the E10 mandate, any subsidies and political donations/ influence are outside the scope of this assessment. The diversion of high quality starch to ethanol is considered above.
Food Security is impacted by ethanol production from wheat processing. This also impacts on the price and supply of grain for food and agriculture [RSB Criterion 5]	SS operations are not within an area of food insecurity. Feedstock for biofuel operations is from waste starch in accordance with <i>RSB-STD-POL-01-001 V1.0 RSB Policy for certification of biofuels based on end of life products and wastewater</i> .



**Manildra Group of Companies  
Shoalhaven Starches Pty Ltd  
160 Bolong Road  
Bomaderry NSW 2540**

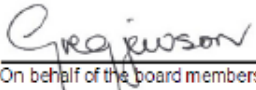
Operates a management system  
that complies with the requirements of:

**Roundtable on Sustainable Biofuels  
RSB-STD-01-001 RSB Principles and Criteria**

The Scope of Certification is:

The scope of the Participating Operator's activities are defined as Biofuel (ethanol) production from waste starch originating from wheat processing. Under the RSB Certification System, the Participating Operator is defined as; a Biofuel Producer.

Date of Issue: 25 January 2012  
Expiry Date: 25 January 2014  
Certificate Number: 11894002-RSBPC-001  
Certification Number: 11894  
Participating Operator Code: RSB 00001  
Certification Date: 25 January 2012

  
On behalf of the board members



The status of this certificate is displayed at: <http://rsb.epf.ch/page-67255-en.html>  
This RSB certificate is only valid if duly registered in the RSB database(s) of registered RSB certificates and that the validity of this RSB certificate shall be verified in the RSB database(s) of registered RSB certificates  
This RSB certificate itself does not constitute evidence that a particular product supplied by the certificate holder is certified to RSB standards. Products offered, shipped or sold by the certificate holder can only be considered covered by the scope of this certificate when the required RSB claim is clearly stated on-product.

This RSB certificate was issued in compliance with the RSB standards and the RSB certification systems  
To confirm the currency of this certificate please email [certification@ncsi.com.au](mailto:certification@ncsi.com.au)  
This Certificate remains the property of NCS International Pty Limited ACN 078 858 211

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**END OF PUBLIC SUMMARY**

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