

# Certification Evaluation Report

*Roundtable on Sustainable Biomaterials*

*Amyris, Inc.*

**SCS Certificate Code- SCS-RSB/PC-0008**

Rua James Clerk Maxwell, 315. Campinas, São Paulo/SP. Zip Code: 13069-380. Brazil

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www.amyris.com

CERTIFIED	EXPIRATION
May 18, 2016	May 17, 2018

DATE OF FIELD AUDIT
May 09, 2017
DATE OF LAST UPDATE
July 17, 2017

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## FOREWORD

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SCS Global Services (SCS) is a certification body accredited by the Roundtable on Sustainable Biomaterials (RSB) to conduct evaluations of biofuel operators. Under the RSB/SCS certification system, participating operators meeting international standards of biofuel production can be certified as “sustainable,” thereby permitting the Operator’s use of the RSB endorsement and logo in the marketplace subject to regular RSB/SCS oversight.

SCS deploys interdisciplinary teams of natural resource specialists and other experts all over the world to conduct evaluations of biofuel operations. SCS evaluation teams collect and analyze written materials, conduct interviews with Participating Operator’s staff and key stakeholders, and complete field and office audits of the operation(s) identified in the certification scope. Upon completion of the fact-finding phase of all evaluations, SCS teams determine compliance to the RSB Principles and Criteria.

Please Note: An 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. For more information about the RSB, visit their website at [www.rsb.org](http://www.rsb.org).

### **Organization of the Report**

This report of the results of our evaluation is divided into two sections. Section A provides the public summary and background information that is required by the Roundtable on Sustainable Biomaterials. This section is made available to the general public and is intended to provide an overview of the evaluation process, the management programs, and policies applied to the Participating Operator, and the results of the evaluation. Section A will be posted on the RSB Participating Operators Database (<http://rsb.org/certification/participating-operators/>). Section B contains more detailed results and information for use by the Participating Operator.

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## SECTION A – PUBLIC SUMMARY

### 1.0 GENERAL INFORMATION

#### 1.1 Operator Information

##### 1.1.1 Name and Contact Information

Organization name	Amyris do Brasil Ltda.		
Operator Number	1245		
Contact person	Carolina Nascimento Goffi		
Address	Rua James Clerk Maxwell, 315. Campinas, São Paulo-SP. Zip Code: 13069-380. Brazil	Telephone	+55 19 3783 9450
		Fax	
		e-mail	cgoffi@amyris.com
		Website	http://www.amyris.com/

#### 1.2 Scope of Certificate

Please choose one:	<input checked="" type="checkbox"/> <b>RSB EU RED</b>	<input type="checkbox"/> <b>RSB Global</b>
The scope assessment agrees with the scope under which the operator applied	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
If no, please explain:		
<i>Note: If the scope is different, please contact SCS.</i>		

SITE INFORMATION FOR AGRICULTURAL SITES OR FEEDSTOCK PRODUCTION SITES		
Site Type	<input type="checkbox"/> Agriculture	<input type="checkbox"/> Forestry
	<input type="checkbox"/> Biomass Production	<input checked="" type="checkbox"/> Other: Industrial
Feedstock Produced:	None	

INDUSTRIAL FACILITIES	
Name	Amyris do Brasil Ltda.
Type	<input type="checkbox"/> Agriculture Milling and/or Fermentation <input type="checkbox"/> Vegetable oil Extraction <input type="checkbox"/> Biofuel Production and/or Distribution <input type="checkbox"/> Storage or Distribution <input checked="" type="checkbox"/> Other, please explain here: Manufacture of Farnesene
Location/City	Rodovia Brotas/Torrinha, KM 7.5, Fazenda Paraíso, Brotas – SP, Brazil.
Geographic location ( <i>Latitude &amp; Longitude</i> )	<i>Latitude 22°21'13.75"S; Longitude 48° 6'21.11"O</i>
Total workers covered by scope of certification:	80
Number of women workers	17
Number of processing steps	<b>Farnesene plant:</b> sugar cane syrup reception and storage; sterilization; fermentation, centrifugation, distillation, storage and loading; transportation to Outsourcer Service and expedition (product delivery to the customer). Note: Outsourcer Service is out of the scope.
<b>Annual throughput of previous 12 months</b> ( <a href="#">Can be moved to appendix if certain information is confidential</a> )	
Feedstock Input (Metric Ton)	Sugar Syrup: 37,068 MT
Final/Primary Product Output (Metric Ton)	Farnesene: 6,453 MT
Intermediate/by-product Output (Metric Ton)	None
% output yield compared to input material (total output/total input)	17,41%
Amount sold as RSB certified (tons)	None
<b>Description of Production/Processing Activities:</b>	

The Amyris production plant receives sugarcane syrup (65 brix) from a nearby sugar mill. The sugars contained in the syrup are transformed by the Amyris proprietary fermentation and separation processes into a renewable biofuel intermediate component.

The company has only one raw material supplier (company Tonon Bioenergia S.A – Sugar mill and alcohol – Unit of Paraiso – Brotas - SP). Amyris factory was built in area near to this sugar & alcohol. This supplier is not certified by RSB neither any other certification scheme.

In the Amyris plant, the following processes are involved: purchasing, receiving of raw materials, production (Farnesene manufacturing), billing (issue of sale documents or product transfer to the service provider), PCPM (planning and control of production and raw materials), expedition (product delivery to the customer).

After farnesene manufacturing, this product is sent to a service provider for hydrogenation process. In the hydrogenation process, farnesene is turned into farnesane. This activity (outsourcing service) is not included in the RSB certification scope.

### 1.3 Standards Used

#### 1.3.1 Applicable RSB-Accredited Standards

Title	Version	Date of Finalization
RSB EU RED Standard for Traceability (RSB-STD-11-001-20-001)	3.5	9 August 2016
RSB Standard for Participating Operators (RSB-STD-11-001-30-001)	3.2	1 May 2016
RSB Risk Management (RSB-STD-11-001-60-001)	3.2	9 August 2016
RSB GHG Calculation Methodology (RSB-STD-01-003-01)	2.1	7 December 2012
RSB Procedure on Communication and Claims (RSB-PRO-11-001-50-001)	3.2	9 August 2016
RSB Standard for EU Market Access (RSB-STD-11-001)	3.0	9 August 2016

All standards employed are available on the websites of the Roundtable on Sustainable Biomaterials (<http://rsb.org/sustainability/rsb-sustainability-standards/>). Standards are also available, upon request, from SCS Global Services (<http://www.scsglobalservices.com/>).

## 2.0 EVALUATION PLANNING & PROCESS

### 2.1 Documentation Submitted by Operator

Amyris' Account:	Operator Number: 1245
RSB Participating Operator Agreement:	Signed in August 1 <sup>st</sup> , 2013

### 2.2 Audit Type and Determination

The following table summarizes the audit types for RSB Audits:

	Low risk class	Medium risk class	High risk class
Certificate validity	5 years	3 years	2 year
Main audit	Every 5 years	Every 3 years	Every 2 year
Surveillance audit	Annual	Annual	Annual

### 2.3 Audit Team

#### 2.3.1 Determination of Audit Team

- Desk audits shall always be conducted by at minimum one (1) international lead auditor. The lead auditor appointed may include additional auditors and/or technical experts in the audit team if this is required by the extent of the audit.
- Field audits shall always be led by one (1) international lead auditor.
- The lead auditor appointed shall include at minimum one (1) local auditor in the audit team. The lead auditor appointed may include additional auditors and/or technical experts in the audit team if this is required by the extent of the audit.
- For field audits of participating operators in High Risk class shall always the lead auditor appointed shall appoint at minimum
  - one (1) local auditor and



- one (1) technical expert on social issues to evaluate compliance with social requirements and the risk of non-compliance due to social issues and
- one (1) technical expert on environmental issues to evaluate compliance with environmental requirements and the risk of non-compliance due to environmental issues.
- The lead auditor appointed may include additional auditors and/or technical experts in the audit team if this is required by the extent of the audit.

### 2.3.2 Audit Team

<b>Auditor Name:</b>	Juliana Shimoyama	<b>Auditor role:</b>	Lead Auditor
<b>Qualifications:</b>			
Juliana is a chemical engineer who graduated from the Federal University of Uberlandia (UFU). She participated in research projects in the laboratory of particulate Systems of the UFU geared towards the separation of yeasts from alcoholic fermentation in hydrocyclones (2010-2011). She is a Lead auditor in the following programs: Roundtable on Sustainable Biomaterials (RSB) since 2013 and Bonsucro since 2014. She is also an auditor for the quality assurance program for the Renewable Fuel Standard (RFS) program of the United States since 2014.			

## 2.4 Evaluation Schedule and Extent of Audit

### 2.4.1 Determination of Extent of Audit

Total number of subsidiaries, branch offices, affiliated entities, external third parties contracted or otherwise engaged, operational structures, sites, facilities, processing and production units, and supply chain structures	Amyris has only one production unit.
Participating Operator Risk Class	Low
Disputes or prior Non-compliances	None
Changes in scope since last evaluation	None
Total number of compliance claims	None. There are no sales of certified product.

### 2.4.2 Evaluation Itinerary and Activities

Time	Element/Activity	Personnel Involved
Tuesday, May 9th 2017	Farnesene Plant, Brotas – SP.	
8:00 – 9:00	<b>Opening Meeting</b> <ul style="list-style-type: none"> <li>- Introduction to certification program and assessment process to on-site staff</li> <li>- Review of scheduled activities</li> <li>- Review of RSB Procedures; confirm roles, responsibilities and processes.</li> <li>- Confirmation of scope of products to be certified and any product groupings. and clarification of all suppliers; farms, blending, transportation, storage</li> <li>- Client to outline production process and overall process flow.</li> <li>- Update from client and any social or environmental changes to the operation</li> <li>- Follow up on implementation of any corrective action plans from desk audit or previous initial field audit</li> </ul>	Management
9:00 – 11:00	<b>Document Review</b> <ul style="list-style-type: none"> <li>- Review site map(s)</li> <li>- Review documentation of historic land use/land tenure, legal tenure</li> <li>- Review of all relevant business licenses</li> <li>- Review of land and water use permits</li> <li>- Review of tax documents</li> <li>- Analysis of material balances and records</li> <li>- Resource and energy usage, conservation and Efficiency</li> <li>- Integrated waste management</li> </ul>	Management
11:00-12:30	<b>Human Resources</b> <ul style="list-style-type: none"> <li>- Review of contracts, policies and training records grievances</li> <li>- Training and occupational health and safety record</li> <li>- Complaints, food security, piece work and living wage, equality issues</li> <li>Records for freedom of association mechanism</li> </ul>	Management representative for HR

12:30-13:30	<p><b>Lunch Break</b></p> <ul style="list-style-type: none"> <li>- Working lunch off site</li> </ul>	
13:40 – 15:00	<p><b>Site Walk-through</b></p> <ul style="list-style-type: none"> <li>- Observe ponds/tanks/reservoir(s)</li> <li>- Observe feed storage and feeding procedures</li> <li>- Observe chemical storage and disposal</li> <li>- Observe sludge repository or disposal</li> <li>- Observe other critical control points</li> </ul>	Production, Warehouseman, and Post Production Personnel
15:00 – 15:40	<p><b>Worker Interviews</b></p> <ul style="list-style-type: none"> <li>- Interviews with key staff by risk category in absence of supervisors</li> <li>- Provide assurance for confidentiality</li> <li>- Leave contact information, such as business cards</li> </ul>	Focus Typical Workers (gender/age) and Low paid, Seasonal, Temporary, and non-Supervisory Personnel
15:40 – 16:20	<p><b>Interviews with neighbouring community members</b></p> <ul style="list-style-type: none"> <li>- Listen to independent assessment of prior and informed consent</li> <li>- Independent cross check of potential social (e.g status and impacts, land tenure, food security) and environmental issues (e.g. understanding of no-go areas, high biodiversity or special conservation areas addressed or not)</li> <li>- Check child labor and piece work payments</li> </ul>	Local stakeholders  *Note: during audit it was clarified that stakeholder interviews would not take place
16:20 – 17:30	<p><b>Report Writing</b></p> <ul style="list-style-type: none"> <li>- Auditor(s) take time to consolidate notes and confirm audit findings</li> </ul>	
17:30	<p><b>Closing Meeting</b></p> <ul style="list-style-type: none"> <li>- Presentation of General audit finding</li> <li>- Presentation of all non-compliances and opportunities for improvement</li> <li>- Fix timetables for corrective actions</li> <li>- Reiterate SCS appeal policy</li> <li>- Ask for questions</li> </ul>	Management

## **2.5 Evaluation of Management System**

### **2.5.1 Methodology and Strategies Employed**

SCS deploys interdisciplinary teams with expertise in agriculture, ecology, forestry, social sciences, natural resource economics, and other relevant fields to assess an Operator's compliance to RSB standards and policies. Evaluation methods include document and record review, implementing sampling strategies to visit a broad number of site and facility types, observation of implementation of management plans and policies, and stakeholder analysis. When there is more than one team member, team members may review parts of the standards based on their background and expertise. On the final day of an evaluation, team members convene to deliberate the findings of the assessment jointly. This involves an analysis of all relevant site observations, stakeholder comments, and reviewed documents and records. Where consensus between team members cannot be achieved due to lack of evidence, conflicting evidence or differences of interpretation of the standards, the team is instructed to report these in the certification decision section.

### **2.5.2 Capacity of the participating operator to implement its management systems**

Amyris' operations follow the guidelines of the Safety work and Environment Policy and orientation of its ethics code. In order to achieve those guidelines, the responsibilities are divided among the areas of regulatory issues, health and safety, environment, quality and human resources.

During the audit, evidences collected and analyzed thru documentation, field inspections and interviews indicated that Amyris has a high compliance with the requirements of the RSB Standards.

At Amyris, the RSB certification is recognized as a top management responsibility of the company and any other hierarchical levels, and compliance with the guidelines set forth herein demonstrates a commitment to compliance with the RSB Standard. In order to achieve and maintain RSB Certification, the responsibilities are divided among the areas of Regulatory Affairs, Health and Safety, Environment, Quality and Human Resources and feature implementation and maintenance of RSB certification. More information related to Amyris' management systems is described in Appendix 2.

As of May 9th, 2017, Amyris had a total 181 employees, 80 of which are included in the RSB scope.

### 2.5.3 Evaluation of RSB compliance claims and use of RSB trademarks

Type (compliance claim, trademark use)	Description	Findings
N/A		
Amyris does not have certified product, as the feedstock supplier is not certified yet.		

### 2.6 Stakeholder Consultation Process (N/A)

In accordance with SCS and RSB protocols, consultation with key stakeholders is an integral component of the evaluation process. Stakeholder consultation takes place prior to, concurrent with, and following field evaluations. The primary purpose of such consultation is to solicit input from affected parties as to the strengths and weaknesses of the Participating Operator’s management system and operations, relative to the standard, and the nature of the interaction between the company and the surrounding communities.

Principal stakeholder groups are identified based upon the certification scope of the participating operator.

Stakeholder consultation activities are organized according to the requirements of the RSB. The table below summarizes the major comments received from stakeholders and the assessment team’s response. Where a stakeholder comment has triggered a subsequent investigation during the evaluation, the corresponding follow-up action and conclusions from SCS are noted below.

#### 2.6.1 Summary of Stakeholder Comments and Responses from the Team, Where Applicable (N/A): Surveillance Audit

### 2.7 Process of Determining Compliance

#### 2.7.1 Structure of Standard and Degrees of Non-Compliance

RSB-accredited biofuel standards consist of a three-level hierarchy: the principle, the criteria that correspond to that principle, and then the performance indicators that elaborate upon each criterion. Consistent with SCS Sustainable Biofuels Program evaluation protocols, the team collectively determines whether or not the subject operation is in compliance with every applicable indicator of the relevant sustainable biofuel standard. Each non-compliance must be evaluated to determine whether it constitutes a major or minor non-compliance at the level of the associated criterion or sub-criterion. Not all indicators are equally important, and there is no simple numerical formula to determine whether an

operation is in non-compliance. The team therefore must use their collective judgment to assess each criterion and determine if the Operator is in compliance. If the Operator is determined to be in non-compliance at the criterion level, then at least one of the applicable indicators must be in major non-compliance.

### 2.7.2 Interpretations of Major and Minor Non-compliances

*Major Non-compliances*, either alone or in combination with non-compliances of other applicable indicators, result (or are likely to result) in a fundamental failure to achieve the objectives of the relevant RSB Criterion. These non-compliances must be resolved or closed out before a certificate can be awarded. If Major NCs arise after an operation is certified, the timeframe for correcting these non-compliances is typically no more than three months. Certification is contingent on the certified FME’s response to the NCs within the stipulated time frame.

*Minor Non-compliances* are typically limited in scale or can be characterized as an unusual lapse in the system. Most minor NCs are the result of a non-conformance at the indicator-level. Non-compliances must be closed out within a specified time period of award of the certificate.

### 2.7.3 Major Non-compliances

<input checked="" type="checkbox"/>	No major NCs were issued to the Operator during the evaluation. Any minor CARs from previous surveillance audits have been reviewed and closed prior to the issuance of a certificate.
<input type="checkbox"/>	Major NCs were issued to the Operator during the evaluation, which have all been closed to the satisfaction of the audit team and meet the requirements of the standards. Any minor CARs from previous surveillance audits have been reviewed and closed prior to the issuance of a certificate.
<input type="checkbox"/>	Major NCs were issued to the Operator during the evaluation and the Operator has not yet satisfactorily closed all major NCs.

### 2.7.4 Non-compliances and Current Status

Instructions:


- Initial certification audit: list all Non-conformities and Opportunities for Improvement issued during this audit.

- Surveillance/Recertification: list status of minor NCs that were not closed in previous audit, then list new NCs/OFIs issued during this audit.

Summary of Non-compliances and Current Status				
Non-compliance Number	Type of Non-compliance	Relevant RSB Standard & Indicator No.	Summary of Finding and Evidence Collected	Status of Non-compliance (Open/Closed)
2016-04	Minor NC	Principle 5 of RSB-IND-11-001-20-001 (V 2.1)	Amyris has not yet taken measures to address Principal 5 as Brazil's HDI has only recently triggered the necessity for such procedures according to the screening tool.	Closed.

### 3.0 CERTIFICATION DECISION

Certification Recommendation	
Operator to be awarded RSB certification subject to the minor non-compliances stated in Section 4.2.5.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
The SCS evaluation team makes the above recommendation for certification based on the full and proper execution of the SCS Responsible Biofuels Program evaluation protocols. If certification is recommended, the Operator has satisfactorily demonstrated the following without exception:	
Operator has addressed any Major NC(s) assigned during the evaluation.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Operator has demonstrated that their system of management is capable of ensuring that all of the requirements of the applicable standards are met over the sites and facilities covered by the scope of the evaluation.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Operator has demonstrated that the described system of management is being implemented consistently over the sites and facilities covered by the scope of the certificate.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Comments and/or details of any issue which was difficult and/or impossible to evaluate:	

<b>To be completed by Certification Decision-Making Entity</b>	<b>Technical Review by:</b> If different to decision-maker	Inna Kitaychik
	<b>Certification decision:</b>	Continued Certification
	<b>Certification decision by:</b>	Matthew Rudolf 
	<b>Date of decision:</b> For initial or continued certification	7/17/17
	<b>Surveillance schedule:</b>	Re-certification Audit Next Year  Notes: