

Certification Evaluation Report

Roundtable on Sustainable Biomaterials

Advanced Biochemical (Thailand) Co., Ltd.

SCS Certificate Code- SCS-RSB/PC-0018

2/1 Map Ta Phut Industrial Estate, I-3 Road, Tambol Map Ta Phut, Amphur Muang, Rayong 21150
Thailand

Ms. Pan-usa Kongmunwattana

<http://www.vinythai.co.th>

CERTIFIED	EXPIRATION
September 28, 2017	September 27, 2022

DATE OF FIELD AUDIT
July 24-26, 2017
DATE OF LAST UPDATE
September 12, 2017

SCS Contact:

Matthew Rudolf | Manager, Biofuels

+1.919.533.4886 (direct) mrudolf@scsglobalservices.com

FOREWORD

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.

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	Advanced Biochemical (Thailand) Co. Ltd.		
Operator Number	1413		
Contact person	Pan-usa Kongmunwattana		
Address	Q. House, Sathorn Building, 18th Floors, No.11 South Sathon Road, Kwaeng Thung Maha Mek, Khet Sathon, Bangkok, Thailand	Telephone	+66 (9) 0197-8466
		Fax	+66(0) 2030-6801
		e-mail	pan-usa.kongmunwattana@vinythai.co.th
		Website	http://www.vinythai.co.th

1.1.2 Additional Parties Involved (Can be moved to appendix if certain information is confidential)

Organization name	Vinythai Public Company Limited		
Contact person	Ms. Natthamol Seanarmart		
Address	2 Map Ta Phut Industrial Estate, I-3 Road, Tambol Map Ta Phut, Amphur Muang, Rayong 21150 Thailand	Telephone	+6638-925-000 ext 1129
		Fax	+6638-683-048
		e-mail	natthamol.seanarmart@vinythai.co.th
		Website	http://www.vinythai.co.th
Nature of Involvement:			
Operating chemical company hosting Advanced Biochemical (Thailand) Co. Ltd. facilities and sharing certain facilities and resources under contractual agreements.			

1.2 Scope of Certificate

Please choose one:	<input type="checkbox"/> RSB EU RED	<input checked="" type="checkbox"/> RSB Global
Please select boxes that apply:	<input type="checkbox"/> Pre-assessment	<input type="checkbox"/> 1st Annual Surveillance
	<input type="checkbox"/> Initial Assessment	<input type="checkbox"/> 2nd Annual Surveillance
	<input checked="" type="checkbox"/> Re-certification	

	<input type="checkbox"/> Follow-Up to NCs	<input type="checkbox"/> 3rd Annual Surveillance <input type="checkbox"/> 4th Annual Surveillance
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:		
Manufacture and supply of Bio-based Epichlorohydrin (ECH) from Vegetable Oil derived Glycerol		

INDUSTRIAL FACILITIES	
Name	Advanced Biochemical (Thailand) Co. Ltd.
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: Bio-material production
Location/City	Amphur Muang, Rayong, Thailand
Geographic location (<i>Latitude & Longitude</i>)	Latitude: 12°41'23.09" North Longitude: 101°7'59.17" East
Start date of operations (initial start date)	February 14, 2012
Number of processing steps	2
Annual throughput of previous 12 months (Can be moved to appendix if certain information is confidential)	
Feedstock Input (Metric Ton)	Information is confidential, see appendix
Final/Primary Product Output (Metric Ton)	Information is confidential, see appendix
Intermediate/by-product Output (Metric Ton)	Information is confidential, see appendix
% output yield compared to input material (total output/total input)	Information is confidential, see appendix
Amount sold as RSB certified (tons)	0
Description of Production/Processing Activities: Refined glycerin reacts with hydrogen chloride to form dichloropropanol. Dichloropropanol and sodium hydroxide are processed to make epichlorohydrin.	

1.3 Standards Used

1.3.1 Applicable RSB-Accredited Standards

Title	Version	Date of Finalization
RSB Principles & Criteria	3.0	2016-10-01

RSB Chain of Custody	3.1	2014-09-23
RSB Standard for Participating Operators	3.1	2016-05-01
RSB Risk Management	3.1	2016-09-01
RSB Procedure on Communication and Claims	3.2	2016-01-29
RSB Waste and Residues	1.7	2017-03-31
RSB Standard for Certification of Bio-Products	1.4	2015-06-22
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

Environmental and Social Management Plan (2017-07-21)	Procedure: ABT-E-MKT-7-RSB COMMUNICATIONS & CLAIMS, Issue 1A (2017-08-01)
Affidavit of company registration (2008-03-24)	VNT-C-HSE-2 – LEGAL REQUIREMENTS, Issue 3B (2016-10-11)
RSB Certification - Questionnaire for Self-Risk Assessment (2017-07-14)	VNT-C-HSE-3 - OTHER THAN LEGAL REQUIREMENTS, Issue 3B (2016-10-11)
MANAGEMENT SYSTEM MANUAL, Issue 13 (2017-03-27)	VNT-C-HSE-19-CONTRACTOR CONTROL, Issue 6, (2016-10-11)
CONTENT OF MANAGEMENT SYSTEM PROCEDURES, Issue 30B (2017-07-05)	VNT-C-IMS-11- COMMUNICATION, PARTICIPATION AND CONSULTATION, Issue 1A, (2016-02-10)

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 years
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

Auditor Name:	John Shideler	Auditor role:	Lead Auditor
<p>Qualifications: Mr. John Shideler is an environmental professional with 19 years’ experience auditing management systems and greenhouse gas assertions for a number of accredited certification bodies. He is currently certified as a greenhouse gas lead verifier by the California Air Resources Board. He is an experienced ISO 14001/OHSAS 18001 lead auditor and previously held lead auditor certification for auditing Responsible Care management systems for members and partners in the chemical manufacturing industry. As a US expert, he has contributed to the writing of several greenhouse gas standards (ISO 14064-3, ISO 14065, ISO 14066, ISO 14067, and ISO 14069). He is the current chair of ISO Technical Committee 207 Subcommittee 4 on Environmental Performance Evaluation, and he served as ISO TC207 liaison to ISO Project Committee 248 which published ISO 13065, Sustainability criteria for bioenergy. He earned a PhD degree in history at the University of California, Berkeley.</p>			
Interpreter Name:	Kasamon Pilantanadilok	Interpreter role:	Provide interpretation/ translation services from English to Thai and from Thai to English
<p>Qualifications: A Bachelor degree in Communication Art, King Mongkut Institute of Technology, Ladkrabang, Bangkok, Thailand</p> <ul style="list-style-type: none"> ○ Certifications of Business Studies and International Trade, British Columbia Institute of Technology, Vancouver, BC, Canada. ○ 12 Years of experience in management and export field. ○ Experience as an interpreter and a business assistant for AIBJ Inc., ATAGO Group, Tokyo, Financial assistant and other business clients. ○ Previous clients: TOYOTA Boshoku, journalists of Le Monde and World Eye Report, Economy Crime Suppression Division and other business clients. ○ Awards: Competent Communicator and Advanced Communicator Bronze from Toastmasters International. 			

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	<p>Advanced Biochemical (Thailand) Co. Ltd. (ABT) is a wholly owned subsidiary of Vinythai Public Company Limited (Vinythai), and is co-located with its parent in the Map Ta Phut Industrial Estate in Ampur Mueang, Rayong. Employees at a Bangkok sales and marketing office provide relevant support services. ABT receives industrial services from Vinythai. Some Vinythai employees work directly in the ABT plant and others support ABT's operating unit with less than full-time services.</p> <p>In addition to its manufacturing site, ABT leases 2 storage tanks with 10,000-metric tonne capacity at the nearby Thai Tank Terminal Ltd.</p> <p>ABT sources glycerine from biodiesel and oleochemicals producers located around the world.</p>
Participating Operator Risk Class	Low
Disputes or prior Non-compliances	No disputes; previous RSB certification non-compliances have been closed.
Changes in scope since last evaluation	Addition of Thai Tank Terminal Ltd. as a storage facility.
Total number of compliance claims	None.

2.4.2 Evaluation Itinerary and Activities

Date: 2017-07-24	
Operation(s)/ sites visited	Activities/ notes
ABT/Vinythai plant	<p>Opening meeting</p> <p>Review of Participating Operator Requirements Principles and Criteria 1, 2, 4, 9, 10, 11</p> <p>Interview Human Resources manager</p> <p>Procedure on communication and claims</p> <p>Risk Management</p> <p>Site walk-through</p>
Date: 2017-07-25	
Operation(s)/ sites visited	Activities/ notes

ABT/Vinythai plant	Chain-of-custody system Information on Points of Origin Worker Interviews Interview ABT/Vinythai welfare committee chairman
Industrial Estate Authority of Thailand	Interview Representatives of Industrial Estate Authority of Thailand
Date: 2017-07-26	
Operation(s)/ sites visited	Activities/ notes
Rayong Provincial Administrative Organization	Meet with Chief Executive of Noen Phra Subdistrict Administrative Organization
ABT/Vinythai plant	Follow up audit trails Complete RSB checklist Closing meeting with 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.

The SCS audit team held an opening meeting on July 24, 2017, with thirteen ABT and Vinythai management and staff at the Vinythai administrative center in Ampur Mueang, Rayong. Fifteen members of management, including the managing director of ABT who participated by telephone from Bangkok, attended the closing meeting held on July 26, 2017. Following the opening meeting, the audit team reviewed documents, interviewed management and staff, and performed a walk-through of the chemical production and materials handling areas of ABT. The audit team interviewed workers and stakeholders, including ABT plant operators, the ABT labor representative, and the Industrial Estate’s environmental and monitoring control scientist and engineer.

2.5.2 Capacity of the participating operator to implement its management systems

ABT operations were included in Vinythai’s integrated management system, which was administered by Vinythai’s Total Quality Management Division Manager (Integrated Management Representative) who reported to the Internal Audit/ Business Performance Improvement Senior Department Manager. The integrated system was certified to the following standards: ISO 9001, ISO 14001, and OHSAS 18001. The plant maintained an environmental quality monitoring program that included occupational health and safety parameters.

The audit team found the management system to be appropriate for a chemical manufacturing site. Vinythai and ABT had designated personnel with roles and responsibilities for management of health, safety, environmental and security risks. In addition to third party certifications, Vinythai and ABT maintained an internal audit/business performance improvement program. Management responsibilities were delegated to specialized personnel. Four teams of operators provided eight-person staff rotations for 24-hour operation of the ABT plant.

Plant facilities were well maintained, clean and orderly. Perimeter security was provided by a subcontractor firm. Personal protective equipment was used by operational personnel within the plant and provided as needed to visitors. At the time of the audit ABT/Vinythai was in the process of updating its process safety management standard which when fully implemented should result in improvements to its overall management of process hazards and risks.

Evaluation of RSB compliance claims and use of RSB trademarks

Type (compliance claim, trademark use)	Description	Findings
Compliance claim	On-product claims	ABT did not make on-product claims or use RSB trademarks
Trademarks	Use of RSB logo or name	ABT did not make on-product claims or use RSB trademarks

2.6 Stakeholder Consultation Process

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

Stakeholder Comments	SCS Response
Economic Concerns	

None identified	N/A
Social Concerns	
None identified	N/A
Environmental Concerns	
None identified	N/A

3.0 RISK ASSESSMENT RESULTS

SCS Risk Assessment Results	Deviations from Operator Risk Assessment Results	Risk Factor Difference
Low	None	None

Due to the results of the Risk Assessment, the evaluation did not need to be rescheduled.

4.0 RESULTS OF THE EVALUATION

4.1 Equivalence between the Audit Team Evaluation and the Operator Self Evaluation

Principle/ Subject Area	Summary of Audit Team Findings	Comparison to Operator Self Evaluation (Equivalence)	Added Risk (Yes/No)
P1: Legality	In compliance	No difference	None
P2: Planning, Monitoring & Continuous Improvement	In compliance	No difference	None
P3: Greenhouse Gases	Not applicable	No difference	None
P4: Human and Labor Rights	In compliance	No difference	None
P5: Rural & Local Development	Not applicable	No difference	None
P6: Food Security	Not applicable	No difference	None
P7: Conservation	Not applicable	No difference	None
P8: Soil	Not applicable	No difference	None
P9: Water	In compliance	No difference	None
P10: Air	In compliance	No difference	None
P11: Technology	In compliance	No difference	None
P12: Land Rights	Not applicable	No difference	None
FINAL RISK CLASS	Low	Low	

4.2 Process of Determining Compliance

4.2.1 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.

4.2.2 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 PO'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.

4.2.3 Major Non-compliances

<input 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 checked="" 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.

4.2.4 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)
1	Major	RSB-STD-20-001, v. 3.1 F.1.6.2	With respect to its glycerine suppliers, ABT had not documented information related to production status, processing pathway, and production volume information sufficient to enable the RSB auditor to fulfill the requirements of H.1.5.1.4.b in RSB-PRO-07-001 as a desk audit.	Closed

5.0 CERTIFICATION DECISION

Certification Recommendation	
Operator to be awarded RSB certification subject to the non-compliances stated in Section 4.2.4.	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:	None.

To be completed by Certification Decision-Making Entity	Technical Review by: If different to decision-maker	Inna Kitaychik
	Certification decision:	Operator is to be Certified
	Certification decision by:	Matthew Rudolf 
	Date of decision: For initial or continued certification	September 12, 2017
	Surveillance schedule:	Surveillance audit 12 months from Re-certification Audit to take place July 2018 Notes: