

## INTERNATIONAL ELECTROTECHNICAL COMMISSION SCHEME FOR CERTIFICATION TO STANDARDS RELATING TO EQUIPMENT FOR USE IN EXPLOSIVE ATMOSPHERES (IECEX SYSTEM)

Title: Assessment Report for the Surveillance of SIRIM QAS International Sdn. Bhd., an Accepted Ex Certification Body (ExCB) in the IECEx 05 Certification of Personnel Competence Scheme as well as a Scope Extension request to include Units Ex 004, 006 and 009.

**Circulation to: ExMC – IECEx Management Committee** 

## **Introduction**

This document provides a Report from the IECEx Lead Assessor for both the Surveillance Assessment, as well as a Scope Extension Assessment request, for SIRIM QAS International Sdn. Bhd.

ExMC Members are requested to consider this Report and the recommendation of the IECEx Assessment Lead Assessor for the acceptance of an extension of scope for SIRIM to include additional Units Ex 004, 006 and 009 mentioned under the IECEx 05 Scheme.

Please return the voting form, a separate Word document, by the closing date of

2016 08 10

Kind regards

Chris Agius

**IECEx Executive Secretary** 

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Body assessed	SIRIM QAS International Sdn. Bhd	Date(s) of site	6 <sup>th</sup> & 7 <sup>th</sup> April 2016
		Assessment	1



# ASSESSMENT REPORT

BODY UNDER ASSESSMENT:	SIRIM QAS International Sdn. Bhd. 1, Persiaran Dato' Menteri, Section 2, P.O. Box 7035, 40700 Shah Alam, Selangor Darul Ehsan, Malaysia
SITE(S) ASSESSED:	SIRIM QAS International Sdn. Bhd. 1, Persiaran Dato' Menteri, Section 2, P.O. Box 7035, 40700 Shah Alam, Selangor Darul Ehsan, Malaysia

IECEX SITE RE-ASSESSMENT TEAM:	Mr Ralph C Wigg – Lead Assessor
REPRESENTATIVE/S OF BODY:	Tn. Hj. Basori bin Hj. Selamat – Senior General Manager
	Harman bin Alang Kasim- Section Head, ECIS
	Chen Seng Hock – Section Head, TECS
	Additional SIRIM staff were in attendance
DATE(S) OF SITE RE-ASSESSMENT:	6 <sup>th</sup> & 7 <sup>th</sup> April 2016

Body assessed	SIRIM QAS International Sdn. Bhd	Date(s) of site Assessment	6 <sup>th</sup> & 7 <sup>th</sup> April 2016



# IECEx 05 Certificate of Personal Competency Scheme

## **ASSESSMENT REPORT of**

NEW IECEX APPLICANT BODY EXISTING IECEX CERTIFICATION BODY (EXCB)

ASSESSMENT TYPE:	ATTACHMENTS No. 9 Page	
Application:		
Surveillance:		
Re-Assessment:		
Other:	Scope Extension - IECEx Application form   6	
Assessment duration:	2 Days on-site 6 <sup>th</sup> & 7 <sup>th</sup> April 2016	
RECOMMENDATION BY IECEx ASSESSOR(S) (Select one item only)	<ul> <li>That Acceptance be granted for the scope extension</li> <li>That Acceptance be withheld/suspended</li> <li>That Acceptance continues</li> <li>That Acceptance be continued conditional on Non Compliance raised, having agreed corrective action and time scales to rectify the System within and agreed time agreed by the Assessors</li> </ul>	

	Body assessed	SIRIM QAS International Sdn. Bhd	Date(s) of site Assessment	6 <sup>th</sup> & 7 <sup>th</sup> April 2016
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## **SECTION 1. GENERAL INFORMATION**

## 1.1 Name of Body:

SIRIM QAS International Sdn. Bhd 1, Persiaran Dato' Menteri, Section 2, P.O. Box 7035, 40700 Shah Alam, Selangor Darul Ehsan, Malaysia

## 1.2 CURRENT IECEX PARTICIPATION:

SIRIM QAS International Sdn Bhd is an existing ExCB for the following IECEx Scheme:

- IECEx Service Facilities Scheme (IECEx 03)
- IECEx Certification of Personnel Competencies (IECEx 05)

## 1.3 DETAILS OF RE-ASSESSMENT TEAM:

Mr Ralph C Wigg – Lead Assessor (AU)

### 1.4 DATES OF ASSESSMENT:

The on-site assessment visit was conducted on 6<sup>th</sup> & 7<sup>th</sup> April 2016

## 1.5 LOCATION OF ASSESSMENT:

The SIRIM QAS International Sdn Bhd location as stated in 1.1 above.

Body assessed	SIRIM QAS International Sdn. Bhd	Date(s) of site Assessment	6 <sup>th</sup> & 7 <sup>th</sup> April 2016



# SECTION 2. ASSESSMENT - SUMMARY OF RESULTS

IECEx Co	IECEX COPC SCHEME REQUIREMENTS		Findings	COMMENTS AND REFERENCE TO ATTACHMENTS
IECEx 05 requirements	Confirmation of Scope of IECEx Acceptance or scope of application, (for new applicant)		COMPLIES	SIRIM Scope cross refers to the Scope of IECEx05 and has embraced all competencies as given in OD504 edition 3 associated with Units Ex 001, Ex 003, Ex 007 and Ex 008 and with the scope extension now includes Units Ex 004 & Ex 009. Following discussions during the on-site assessment it was agreed to also include Unit 006.
		ation that details in original ion are still current (for new ion)	N/A	
		currency and scope of ation (ISO/IEC 17024) ble	COMPLIES	SIRIM do not have accreditation to ISO/IEC 17024. SIRIM confirmed that the assessment for these requirements were to be included. SIRIM have made application to Department of Standards Malaysia seeking accreditation to ISO/IEC 17024. It is not yet confirmed when the assessment is to take place.
	Clause 9.1	(a) in a participating country	COMPLIES	Malaysia is a participating country in the IECEx System
		(b) operate recognized certification scheme	COMPLIES	SIRIM are participating in the IECEx 03-5 Service Facility Certification Scheme
		(c) competence demonstrated by assessment	COMPLIES	IECEx Assessment included technical interviews of SIRIM staff for competence to evaluate to OD 504 for Units Ex 000, Ex 001, Ex 003, Ex 004, Ex 006, Ex 007, Ex 008 and Ex 009. The results of these assessments and the accepted list of examiners is given at Review of Examiners on page 9. It was noted that none of the examiners were recommended for Group III, Combustible Dusts and this will become a Limitation for SIRIM QAS until such time as examiner/s are assessed as suitable for Group III.



IECEX COPC SCHEME REQUIREMENTS	Findings	COMMENTS AND REFERENCE TO ATTACHMENTS
Assessment facilities considered by Assessment team to be appropriate and adequate for assessment of Units, according to OD 504?	COMPLIES	The SIRIM Competence Procedures CoPC/POR/03 defines the requirements for the knowledge skills assessment and examination including the procedures for conducting assessment and examinations at facilities other than the SIRIM. Office. These were assessed by the assessment team and found to be satisfactory however several anomalies were found in the files which SIRIM are to review and ensure staff are appropriately trained to ensure they do not occur again.
Confirmation of which location is the official ExCB location, where more than 1 location is identified? an official ExCB location is one where the following are conducted: - applications received, - contract review (review of application) - assignment of application to ExCB staff - review of exam/assessments - decision to issue Certificate (Contact IECEx Secretary for any questions)	COMPLIES	SIRIM QAS International Sdn. Bhd., 1, Persiaran Dato' Menteri, Section 2, P.O. Box 7035, 40700 Shah Alam, Selangor Darul Ehsan, Malaysia, is confirmed as the official ExCB location for Units Ex 000, Ex 001 & Ex 009. The examination facilities are located at INSTEP Campus, PETRONAS Technical Training Sdn. Bhd, Lot 9764, Mukim Batu Rakit, 21020 Kuala Terengganu, Terengganu Darul Iman, Malaysia are used for the remaining units. Semi portable skills facilities are being developed but will require assessment by an IECEx Assessor before being operational. This may also require additional procedures for implementation.
<b>ISO/IEC 17024 Assessment</b> –Satisfactorily Completed (for bodies without acceptable national Accreditation)	COMPLIES	At the site assessment it was confirmed that the SIRIM QAS Policies and Procedures have been updated comply with ISO/IEC 17024:2012. These procedures have been reviewed and found to comply. Implementation is to be verified at the next assessment.

Body assessed	SIRIM QAS International Sdn. Bhd	Date(s) of site Assessment	6 <sup>th</sup> & 7 <sup>th</sup> April 2016



			July 2016
IECEx Operational Document Requirements	OD 502	COMPLIES	The procedures associated with the scheme have been reviewed as below some minor changes required as noted elsewhere in this report. These have been confirmed to the acceptance of the Assessor.
	OD 503	COMPLIES	Several minor observations were made on the assessments which had been conducted according to the previous. SIRIM will now be operating to revised procedures according to the latest versions of IECEx05 and associated Operational Documents.
	<b>OD 504</b> (Review of ExCB assessment criteria including question bank, mapped against Competency Units of OD 504)	COMPLIES	Additional questions have been prepared for the Units Ex 004, Ex 006 & Ex 009 which are added to the SIRIM Scope. These questions have been reviewed and require minor editorials prior to submitting to IECEx Question Bank. SIRIM will draw on the IECEx Question Bank for all future assessments. Secretariat to follow up.

Body assessed	SIRIM QAS International Sdn. Bhd	Date(s) of site Assessment	6 <sup>th</sup> & 7 <sup>th</sup> April 2016
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#### Additional Remarks concerning the assessment (if any)

SIRIM agreed for this re-assessment (without ISO/IEC 17024) to be conducted earlier than 18 months so it can be co-ordinated with the Scope Extension.

During the on-site assessment it was agreed for SIRIM QAS to include Unit Ex006 in addition to the Units Ex004 and Ex009 previously included in the scope extension application. It was noted that the examiners for Unit Ex006 had been previously assessed and accepted for this unit but it had not been included due to lack of questions accepted for this unit. SIRIM to complete and submit sufficient questions related to Ex006 mapped to the requirements of OD504. Based on the decision by ExPCC Unit Ex000 is also added to the scope without additional assessment.

Following the site assessment, SIRIM provided the Assessor with additional Questions that have been successfully addressed as meeting the requirements of the Units, Ex 004, Ex 006 and Ex 009. While some minor editorial items were raised these are in the process of being submitted to the IECEx Secretariat.

SIRIM have completed the update of their Policies and Procedures to comply with the latest issue of all documents which includes ISO/IEC 17024:2012; IECEx05-Ed.3; OD 501 Ed2; OD 502 Ed3; OD 503 Ed3.1 & OD 504 Ed3

The updated IECEX SCHEME FOR CERTIFICATION OF PERSONNEL COMPETENCIES document No CoPC/PP Issue : 3 Rev. 0 dated 25 Feb 2016 was provided at the assessment. Several procedures were reviewed as noted here and a further post on-site review was undertaken and found acceptable.

Both the latest SIRIM QAS Management Review and Internal Audit were provided for review and found acceptable.

#### **Procedures reviewed**

Record retention. Acceptable with the exception of the time period of 6 years as this does not state when the 6 years commences – if from original issue records for an active file could be destroyed. As examination papers are held electronically measures to ensure security may need review. This may need further consideration also within ExPCC.

Examiner appointment. Procedures for files checked and found good. Recommended to include results of any examination taken by the examiner in their file.

#### Follow up of items from previous assessment

CoPC/PRO 06 Issue 1 Rev0 30/10/2012 Procedure for Maintaining Certification to be revised to prevent Examiners issuing Certificates. Also CoPC/PRO 07 Issue1 Rev 5 dated 30/10/2012 to be revised to prevent Examiners making decisions to cancel or suspend certification. Found to have been adequately implemented.

Internal auditing needs to ensure checking of implementation of all CoPC Procedures are followed, eg document control regarding CoPC Certificates and Personnel Files being maintained. The latest internal audit report was viewed and verified.

The practical assessments seem simplistic for assessing the competence of the persons involved, however this is considerable improvement on the previous system and found acceptable but suggest that they should be reviewed further at the next assessment.

Body assessed SIRIM QAS International Sdn. Bhd Date(s) of site Assessment 6 <sup>th</sup> & 7 <sup>th</sup> April 2		ssessed SIF	Date(s) of site 6 <sup>th</sup> & 7 <sup>th</sup> April 2016
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The Assessment paper for Unit 008 is limited for all concepts further review should be done on the papers but again should be allowed to continue and follow up at the next assessment. Further assessment indicates this is acceptable for gases but a limitation for dusts in the SIRIM QAS scope is recommended until at least one examiner is found acceptable for dusts.

## **Review of Examiners**

All examiners were again interviewed and some – as listed here – additionally accepted for Units Ex 004, Ex 006 and Ex 009 as requested in the scope extension. All examiners have been automatically accepted for the new Unit Ex 000.

None of the examiners have been confirmed as being acceptable for Group III and as such SIRIM have agreed to apply a Scope limitation for dusts until such time as an examiner is found acceptable.

Current accepted units for each examiner.

Harman bin Alang Kasim	Units 000, 001, 004, 007, 008
Muhamad Kamal bin Sabran	Units 000, 001, 003, 004, 006, 007, 008, 009
Syed Fadzil bin Syed Mohamed	Units 000, 001, 007, 008
Muhammad Nazif bin Zakaria	Units 000, 001, 003, 007, 008
Muhammad Azhar bin Md. Aris	Units 000, 001, 007, 008
Ameir Shahir bin Mohd Saleh	Units 000, 001, 007, 008
Mohd Hamizi bin Mohd Samsi	Unit 000
lr. Halim bin Hafiz*	Units 000, 001, 003, 004, 006, 007, 008, 009
lr. Aimi Yusri bin Abdul Kudus*	Units 000, 001, 003, 004, 006, 007, 008
lr. Yusoff Siraj*	Units 000, 001, 009
lr. Abdul Wahid bin Jafar*	Units 000, 001, 009
* Contract Examiner	

#### **ExPCC Files Reviewed**

#### 1) Certificate IECEx CP SRM15.0053 - SIRIM File No Ex05-SIRIM-L3846032

Name: ADIL ASLAM WAKNIS

Doc review CoPC/FOR/02-1.001 well documented and assessed.

Several application forms in the file and application included units outside SIRM scope. No evidence of advice to candidate although there was no assessment for these units.

Application Form sign off for SIRIM not being used (in most cases). Suggested it is either removed or reworded to clearly indicate requirement and used, to ensure that the SIRIM application form aligns with the IECEx accepted scope.

Body assessed SIRIM QAS International Sdn. Bhd	Date(s) of site Assessment 6 <sup>th</sup> & 7 <sup>th</sup> April 2016
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#### 2) Certificate IECEx CP SRM16.0002 - SIRIM File No Ex05-SIRIM-840119145947

#### Name: MUHAMMAD AIZZUDDIN BIN ZAINUDDIN

Application included all voltages but candidate does not have High Voltage qualifications. Recommend this limitation in OD 502 be reviewed by ExPCC-WG1 to make it clear how limitation for voltages can be applied. [Secretariat Note: Matter raised and dealt with during recent meetings in Northbrook]

While it was apparent that SIRIM have the necessary evidence of compliance, not all of the details for the performance assessment were readily located in the file, eg no information regarding the artefacts that were used and for units Ex008 what faults had been applied. Record of assessment (CoPC/FOR/09-1) for unit Ex008 was not in file. SIRIM to review file contents to ensure supporting information remains readily located.

#### 3) Certificate IECEx CP SRM15.0058 - SIRIM File No Ex05-SIRIM-650725115177

Name: ABD MANAN BIN ISMAIL

It was identified that 3 separate certificates exist for this person due to scope changes. Rather than up issue the first certificate separate certificates and ID cards have been provided. This also relates to procedures for re-certification and scope extensions that have changed in the latest edition of IECEx05. SIRIM to cancel all but the latest certificate and review procedures for assessment and issue of certificates for re-certification and scope extensions.

It was identified that the trigger for notification of a pending re-certification was not clear. Recommend that SIRIM to review procedures and the Secretariat to follow up.

[Secretariat Note: The matter of notification of pending re-certifications should be discussed among ExPCC and a review of the ODs undertaken]

#### 4) Certificate IECEx CP SRM16.0005 - SIRIM File No. Ex05-SIRIM-750103025159

Name: MOHD ZAIRI BIN HARON

File good. No issues raised

#### 5) Certificate IECEx CP SRM15.0055 - SIRIM File No. Ex05-SIRIM-M7314813

#### Name: NILESH MARUTI TAMHANKAR

Excellently prepared file. Minor query re example of Ex p being a fuse & luminaire – these are not considered appropriate. Not picked up by the examiner.

#### 6) Certificate IECEx CP SRM14.0030 - SIRIM File No. Ex05-SIRIM-750103025159

#### Name: NILESH MARUTI TAMHANKAR

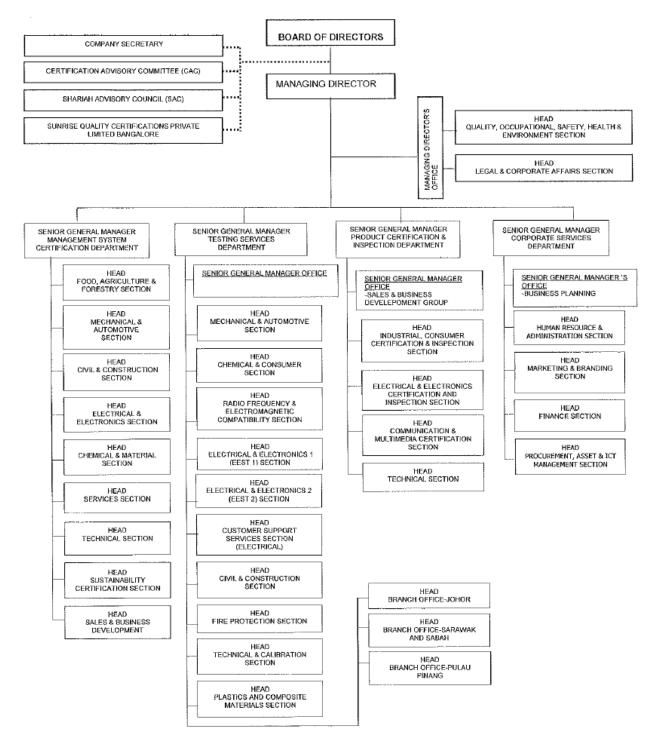
Well constructed file – all documents in order. An additional partially completed application form was in the file which created confusion.

Assessment	Body assessed	SIRIM QAS International Sdn. Bhd		6 <sup>th</sup> & 7 <sup>th</sup> April 2016
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## Organization Chart.

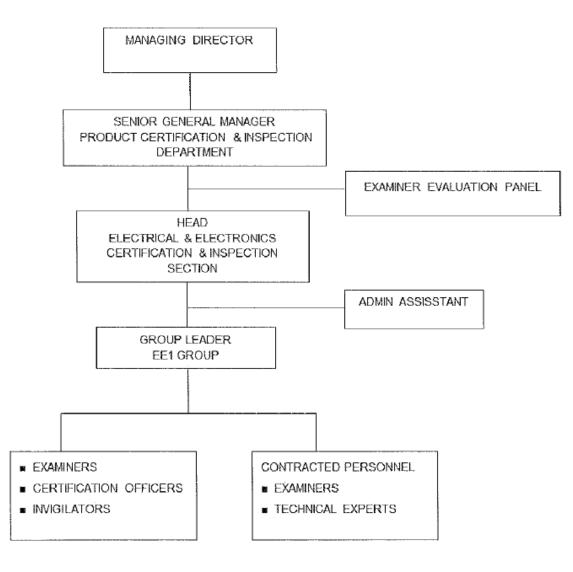
### 1) SIRIM QAS International Sdn. Bhd



Body assessed SIRIM QAS International Sdn. Bhd	Date(s) of site Assessment	6 <sup>th</sup> & 7 <sup>th</sup> April 2016
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## 2) E & E Certification and Inspection Section (ECIS)



Body assessed SIRIM QAS International Sdn. Bhd	Date(s) of site 6 <sup>th</sup> & 7 <sup>th</sup> April 2016 Assessment
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#### **Conclusion of Site Assessment**

The purpose of the site re-assessment was to verify continued compliance with the requirements of the IECEx Scheme for the on-going acceptance of an Ex Certification Body (ExCB). The site assessment forms part of the overall evaluation of the body by the IECEx Management Committee, ExMC and was conducted in accordance with the IECEx Scheme Assessment Procedures, IECEx OD 501. A Summary Report of the on-site assessment team is as follows:

The Assessor findings indicate that subject to compliance with the requirements in this report that SIRIM QAS continue with IECEx05 for Units Ex001, Ex003, Ex007 and Ex008.

In addition the following Units are ADDED to the SIRIM QAS Scope:

Unit Ex 000 – Basic knowledge and awareness to enter a site that includes a classified hazardous area.

Unit Ex 004 – Maintain equipment in explosive atmospheres

Unit Ex 006 – Test electrical installations in or associated with explosive atmospheres, pending questions approved by Assessment team and submitted to Secretariat

Unit Ex 009 – Design electrical installations in or associated with explosive atmospheres

\*\* All units with the exception of Ex 000 have a Scope limitation for Group III which means that Competence related to Combustible Dusts is excluded from the SIRIM QAS Scope until such time as an examiner is accepted.

The Assessment Team recommend SIRIM continue as an accepted CoPC ExCB within the IECEx System.

Body assessed	SIRIM QAS International Sdn. Bhd	Date(s) of site Assessment	6 <sup>th</sup> & 7 <sup>th</sup> April 2016
		Assessment	



## SECTION 3

## Issues Raised by IECEx Assessment Team and Subsequent Responses/Actions

The following shows key issues that were raised at the initial site assessment and included here with the resolutions, together with subsequent actions.

ISSUES RAISED AT ASSESSMENT	RESPONSE FROM SIRIM	ASSESSMENT TEAM COMMENT
The SIRIM QAS Candidate Application Form is not being used consistently regarding the limitation for High Voltage.	SIRIM QAS to review the application form and ensure it is consistently used.	To be reviewed at the next assessment.
Review of Certificate IECEx CP SRM16.0002. No details of the artifacts and questions relating to the skills assessment missing from file.	SIRIM QAS to introduce additional training for examiners and make sure all the relevant documents are correct and included in the files.	To be reviewed at the next assessment
Record retention. Examinations are held electronically but there are no measures to ensure security.	SIRIM QAS to review and implement procedures to ensure documents are secure.	This revised procedure is considered to close this item and it should be assessed during next assessment.
Review of Certificate IECEx CP SRM15.0058. Found that Issue 0 & 1 are both 'Current' This Competent Person also has two other certificates current (SRM13.0002 and SRM14.0079) covering the same units.	SIRIM QAS will notify CoPC person and cancel all but the last certificate issued. Instructions to be included in Policies and Procedures to ensure duplicate certificates are no issued in the future. To be completed no later than 30 April 2016	IECEx Secretariat to ensure completion is effective and correct. Secretariat reports this is in progress and under the Secretariat's monitoring.
Current procedures require a full re-assessment for re- certification. There is no method to notify a CoPC Certificate Holder when re- certification is needed.	SIRIM QAS to introduce procedures for re-certification to allow methods other than full re-assessment and to ensure certificate holders are notified when re-certification is due. To be completed PRIOR to first recertification of SIRIM QAS certificates are due.	To be reviewed at the next assessment

Body assessed SIRIN	I QAS International Sdn. Bhd	Date(s) of site Assessment	6 <sup>th</sup> & 7 <sup>th</sup> April 2016
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ISSUES RAISED AT ASSESSMENT	RESPONSE FROM SIRIM	ASSESSMENT TEAM COMMENT
Sufficient questions related to Ex006 addressing the relevant CAE of OD504 are required.	SIRIM to complete and submit sufficient questions related to Ex006 mapped according to the CAE of OD504	Questions to be reviewed by Lead Assessor and submitted to IECEx no later than 30 <sup>th</sup> June 2016. Scope adjustment will not be finalised until this is completed.

Body assessed SIRIM QAS International Sdn. Bh	Date(s) of site Assessment	6 <sup>th</sup> & 7 <sup>th</sup> April 2016
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