JCM Validation Report Form

A. Summary of validation

A.1. General Information

Title of the project	Introduction of High Efficiency Once-through Boiler in Golf Ball Factory
Reference number	ID022
Third-party entity (TPE)	Lloyd's Register Quality Assurance Limited (LRQA)
Project participant contracting the TPE	Sumitomo Rubber Industries, Ltd.
Date of completion of this report	28/05/2019

A.2 Conclusion of validation

Overall validation opinion	☒ Positive ☐ Negative

A.3. Overview of final validation conclusion

Only when all of the checkboxes are checked, overall validation opinion is positive.

Item	Validation requirements	No CAR or CL remaining
Project design document form	The TPE determines whether the PDD was completed using the latest version of the PDD forms appropriate to the type of project and drafted in line with the Guidelines for Developing the Joint Crediting Mechanism (JCM) Project Design Document, Monitoring Plan and Monitoring Report.	☒
Project description	The description of the proposed JCM project in the PDD is accurate, complete, and provides comprehension of the proposed JCM project.	☒
Application of approved JCM methodology (ies)	The project is eligible for applying applied methodology and that the applied version is valid at the time of submission of the proposed JCM project for validation.	☒
Emission sources and calculation of emission reductions	All relevant GHG emission sources covered in the methodology are addressed for the purpose of calculating project emissions and reference emissions for the proposed JCM project.	☒
	The values for project specific parameters to be fixed *ex ante* listed in the Monitoring Plan Sheet are appropriate, if applicable.	☒
Environmental impact assessment	The project participants conducted an environmental impact assessment, if required by the Republic of Indonesia, in line with Indonesia's procedures.	☒
Local stakeholder	The project participants have completed a local stakeholder consultation process and that due steps were taken to engage	☒

Item	Validation requirements	No CAR or CL remaining
consultation	stakeholders and solicit comments for the proposed project unless a local stakeholder consultation has been conducted under an environmental impact assessment.	
Monitoring	The description of the Monitoring Plan (Monitoring Plan Sheet and Monitoring Structure Sheet) is based on the approved methodology and/or Guidelines for Developing the Joint Crediting Mechanism (JCM) Project Design Document, Monitoring Plan, and Monitoring Report. The monitoring points for measurement are appropriate, as well as whether the types of equipment to be installed are appropriate if necessary.	☒
Public inputs	All inputs on the PDD of the proposed JCM project submitted in line with the Project Cycle Procedure are taken into due account by the project participants.	☒
Modalities of communications	The corporate identity of all project participants and a focal point, as well as the personal identities, including specimen signatures and employment status, of their authorized signatories are included in the MoC.	☒
	The MoC has been correctly completed and duly authorized.	☒
Avoidance of double registration	The proposed JCM project is not registered under other international climate mitigation mechanisms.	☒
Start of operation	The start of the operating date of the proposed JCM project does not predate January 1, 2013.	☒

Authorised signatory:	Mr. ☒ Ms. ☐
Last name: Chiba	First name: Michiaki
Title: Climate Change Manager - Asia & Pacific	
Specimen signature: [redacted]	Date: 28/05/2019

B. Validation team and other experts

	Name	Company	Function*	Scheme competence*	Technical competence*	On-site visit
Mr. ☒ Ms. ☐	Michiaki Chiba	LRQA Ltd.	Team leader	☒	Technical competence authorised	☐
Mr. ☒ Ms. ☐	Cholid Bafagih	LRQA Indonesia	Team member	☒	Technical competence authorised	☒
Mr. ☒ Ms. ☐	Xianxin Yan	LRQA China	Internal reviewer	☒	N/A	☐
Mr. ☐ Ms. ☐				☐		☐

Please specify the following for each item.

* *Function: Indicate the role of the personnel in the validation activity such as team leader, team member, technical expert, or internal reviewer.*

* *Scheme competence: Check the boxes if the personnel have sufficient knowledge on the JCM.*

* *Technical competence: Indicate if the personnel have sufficient technical competence related to the project under validation.*

C. Means of validation, findings, and conclusion based on reporting requirements

C.1. Project design document form

<Means of validation>

The PDD was checked and confirmed as complete against the JCM Guidelines for Developing Project Design Document (PDD) and Monitoring Report (MR) No. JCM_ID_GL_PDD_MR_ver03.0. A valid form of the JCM PDD Form as of the time of commencement of the public comment period No. JCM_ID_F_PDD_ver02.0 was used for the initial version of the PDD that was submitted for public comments started on 25/03/2019. It was re-checked for the revised PDD Version 2.0 dated 03/04/2019. The version is the final version on which the validation was completed.

The details of the persons interviewed and the documents reviewed are shown in the Section E of this report.

<Findings>

Please state if CARs, CLs, or FARs are raised, and how they are resolved.

No issue was raised on the requirements of this section.

<Conclusion based on reporting requirements>

Please state conclusion based on reporting requirements.

The validation team confirmed that the PDD was completed using the valid form of the JCM

PDD Form and in accordance with the JCM Guidelines for Developing PDD and MR.

C.2. Project description

<Means of validation>

The project is to introduce a high-efficiency once-through boiler at a golf ball factory of PT Sumi Rubber Indonesia in Karawang Regency, West Java Province of Republic of Indonesia. The golf ball factory needs considerable energy and boilers consume significant amount of energy at the golf ball factory. The project covers golf ball production process of No. 2 Golf Ball Factory. The golf ball factory introduced 3 ton/h higher-efficiency once-through boiler (fuel: gas only) and Reverse Osmosis (RO) water treatment system with replacing existing 3 ton/h once-through boiler (fuel: oil and gas), and increased the boiler efficiency and stable steam supply.

The project is implemented by PT Sumi Rubber Indonesia from the Republic of Indonesia, Sumitomo Rubber Industries, Ltd. and Nippon Koei Co., Ltd. from Japan (the PPs).

The start date of project operation is on 01/07/2016 and the expected operational lifetime of the project is for 9 years. The PPs referred to the Statutory useful life for the calculation of depreciation and amortization for machinery and equipment issued by Japan's Ministry of Finance for the basis of the expected operational lifetime of the machinery and equipment for the rubber products production industries that covers the duration of the crediting period.

The project receives financial support for JCM model projects from the Ministry of the Environment, Japan. The project once-through boiler is supplied by Kawasaki Thermal Engineering (KTE) and KTE provides supports to PT Sumi Rubber Indonesia direct instruction on proper operation of the boiler and effective periodical checks to maintain efficiency of the boiler.

The validation team assessed the PDD and the supporting documents, interviewed the PPs to validate the requirements concerning accuracy and completeness of the project description.

Through the processes taken, the validation team raised CL 1 as below.

The details of the persons interviewed and the documents reviewed are shown in the Section E of this report.

<Findings>

Please state if CARs, CLs, or FARs are raised, and how they are resolved.

Grade / Ref: CL 1

Nature of the issue raised: The project boiler is operated in parallel with existing boilers to supply steam to the demand of production facility which is fluctuated by time. The PPs were required to clarify how the parallel operation of boilers and the expected increase of steam demand in the future is taken account in the estimation of the ERs.

Nature of responses provided by the PPs: The ERs are estimated with the actual load of boilers

in 2017 (the project boiler generates 66% of the total steam supply) at the constant steam demand for the project period.
Assessment of the responses: The validation team reviewed clarification of the PPs with the operation records of the project boiler and the existing boilers and confirmed that the estimation of the ERs is based on the actual operation load in year 2017 that showed the constant load met by combination of the project boiler and the existing boilers. The combined capacity of the project and the existing boilers is considered sufficient to meet the future increase of steam demand. The estimated ERs were confirmed as realistic and likely achieved by the project as planned.
The CL was closed.
<Conclusion based on reporting requirements>
Please state conclusion based on reporting requirements.
The validation team assessed the project description provided in the PDD with the supporting documents to the requirements on the accuracy and completeness. The validation team confirmed that the proposed JCM project in the PDD is described in accurate and complete manners that is understandable the nature of the proposed project activity.

C.3. Application of approved methodology(ies)

<Means of validation>
The project applied the approved methodology JCM_ID_AM015_ver01.0 Energy Saving by Introduction of High Efficiency Once-through Boiler, Version.01.0.
LRQA assessed if the selected methodology is applicable to the proposed project. The project applicability was checked against each eligibility criterion in the selected approved methodology. The steps taken to validate each eligibility criterion and the conclusions about its applicability to the proposed project are summarised as below.

Criterion 1: The project boiler is a once-through boiler with a rated capacity of 7 ton/hour per unit or less (equivalent evaporation).
Justification in the PDD: The project boiler is a once-through boiler with a rated capacity of 3 ton/hour (equivalent evaporation).
Steps taken for assessment: Document review was conducted on the project documentation, technical specification, the performance test report, and the on-site visit and interviews were conducted at the project site.
Conclusion: Based on the validation processes taken, the validation team confirmed that the project installed 3 ton/hour (equivalent evaporation) once-through boiler in the film factory and the criterion is met.

Criterion 2: Periodical check and maintenance by the manufacturer of boiler or authorized agent is implemented in accordance with the manufacturer's requirement.
Justification in the PDD: PT Sumi Rubber Indonesia arranges necessary periodical check and maintenance by authorized agent (PT Gikoko Kogyo Indonesia) and/or KTE in accordance with the requirement of KTE. It is carried out yearly.
Steps taken for assessment: Document review was conducted on the technical specification, diagrams, drawings, and the on-site visit and interviews were conducted at the project site.
Conclusion: Based on the validation processes taken, the validation team raised CL 2 that resolution is detailed as below. There was a delay of the periodical maintenance from the proposed interval of every year but the PPs have implemented a measure to prevent such delay in the future and the authorised agent confirmed the delay does not affect quality of the project equipment and operation. Therefore the validation team considered the project satisfies the requirements of the criterion.

Criterion 3: Appropriate water purification/demineralization system such as Reverse Osmosis (RO) membrane treatment is installed.
Justification in the PDD: PT Sumi Rubber Indonesia installed RO water treatment system for boiler water.
Steps taken for assessment: Document review was conducted on the request for approval of the project, explanatory documents of the project, the technical specification, the commissioning report, and the on-site visit and interviews were conducted at the project site.
Conclusion: Based on the validation processes taken, the validation team confirmed that RO water treatment system has been installed for boiler water of the project boiler. The criterion is met by the project.

<Findings>

Please state if CARs, CLs, or FARs are raised, and how they are resolved.

Grade / Ref: CL 2
Nature of the issue raised: The maintenance was conducted on 20/12/2017 and the next maintenance was scheduled in March 2019. The PPs were required to clarify how the implementation of the periodical maintenance on yearly basis against requirements of the Criterion 2 would be demonstrated.
Nature of responses provided by the PPs: Due to administrative procedures between the companies, the annual check was conducted in March 2019 instead of December 2018. Improvement of the administrative procedure has been implemented so that a request for the work is issued well ahead.
By this delay, the authorised agent confirmed that there is no loss or decrease in efficiency of the project boiler.

Assessment of the responses: The validation team reviewed the administrative procedure, the maintenance reports and confirmation letter from the authorised agent. The PPs confirmed implementation of the measures to prevent delay of the periodical maintenance. The letter from the authorised agent confirmed that the delay of the periodical maintenance for 3 months did not affect quality of the project equipment and the operation.

The CL was closed.

<Conclusion based on reporting requirements>

Please state conclusion based on reporting requirements.

The validation team confirmed that the project applied the valid version of the approved methodology and the applicability was demonstrated to the eligibility criteria as appropriate.

C.4. Emission sources and calculation of emission reductions

<Means of validation>

The project supplies steam generated by higher-efficient 3 ton/hour once-through boiler installed to the existing golf ball factory for the self-consumption replacing the existing 3 ton/hour once-through boiler.

The source of GHG emissions is fuel consumption by the reference boiler and CO2 emissions in the reference scenario are considered to determine the reference emissions (REs), and fuel consumption by the project boiler and CO2 emissions in the project scenario to determine the project emissions (PEs) in accordance with the applied methodology.

$REp = \Sigma i\ \Sigma j\ (FCp,i,j,PJ \times NCVi,j,PJ \times EF\_RE \times \eta i,PJ / \eta RE \times (100 - Bfi,PJ) / (100 - B\_RE)$

$PEp = \Sigma i\ \Sigma j\ (FCp,i,j,PJ \times NCVi,j,PJ \times EFi,j,PJ$

The annual fuel consumption of the project boiler is estimated ex-ante at 800,000 Nm3.

Net calorific value of natural gas fuel is 0.0331 GJ/Nm3 as provided by the supplier.

CO2 emission factor of fuel used by reference boiler (EF_RE) is determined as 0.0543 tCO2/GJ using IPCC default value at the lower limit in Table 1.4 of Chapter 1 of Vol. 2 from “2006 IPCC Guidelines for National Greenhouse Gas Inventories”.

Efficiency of project boiler i (ηi,PJ) is 0.95 based on the specifications of the project boiler.

Efficiency of reference boiler (ηRE) is determined as 0.89 using the default value of the approved methodology.

Blow flow rate setting of project boiler i (BFi,PJ) is 3.3 % as specified in the boiler water treatment program for a water purification/demineralization system based on the test result.

Blow flow rate setting of reference boiler (BF_RE) is 9.2 % as specified in the boiler water treatment program for a water softener based on the test result.

CO2 emission factor of fuel used by project boiler i for the fuel type j (EFi,j,PJ) is determined as 0.0561 tCO2/GJ using IPCC default value in Table 1.4 of Chapter 1 of Vol. 2 from “2006 IPCC Guidelines for National Greenhouse Gas Inventories”.

REp = 800,000 × 0.0331 × 0.0543 × 0.95 / 0.89 × (100 – 3.3) / (100 – 9.2) = 1,634.527 tCO2e
PEp = 800,000 × 0.0331 × 0.0561 = 1,485.528 tCO2e
ERp = REp – PEp = 1,634.527 - 1,485.528 = 148.999 tCO2e
The validation team assessed the documented evidence and confirmed that all the relevant GHG emission sources covered in the applied methodology are addressed, and the steps taken and the equations applied to calculate REs and PEs for the proposed project comply with the requirements of the approved methodology.
Through the processes taken, the validation team raised CAR 1 as below.
The details of the persons interviewed and the documents reviewed are shown in the Section E of this report.

<Findings>

Please state if CARs, CLs, or FARs are raised, and how they are resolved.

Grade / Ref: CAR 1
Nature of the issue raised: The Monitoring Plan Sheet (MPS) was not completed with the type of gas fuel applicable to the project, either natural gas or LPG, for the parameters FCp,i,j,PJ, NCVi,j,PJ, and EFi,j,PJ (ref. column (j) of Table 1 and column (f) of Table 2).
The estimated value for the parameter EFi,j,PJ was filled with the default value of 0.0543 tCO2/GJ but the value is for EF_RE according to the approved methodology.
Nature of responses provided by the PPs: The PPs submitted revised MPS completed with type of fuel (natural gas) in column (j) of Table 1 and (i) of Table 2 and EFi,j,PJ modified with default value at 0.0561 tCO2/GJ. The estimated ERs were changed by the amendment.
Assessment of the responses: The validation team reviewed the revised PDD and the monitoring spreadsheet, and confirmed that the errors of indication of fuel type and default emission factor were corrected and the changes are reflected to the calculation of ERs in the revised PDD and the monitoring spreadsheet.
The CAR was closed.

<Conclusion based on reporting requirements>

Please state conclusion based on reporting requirements.

The validation team confirmed that:
- The methodology was applied correctly to calculate PEs and REs and no other significant emission source was identified that would be affected and reasonably attributed by implementation of the proposed project but not addressed by the applied methodology;
- The choice of whether an emission source or gas is to be included where the applied methodology allows was reasonably justified by the PPs;
- The MPS was not altered and the fields were filled in as required so that all estimates of the REs could be replicated using the data and parameter values provided in the PDD;
- The values for the project specific parameters fixed ex ante listed in the MPS were appropriate

with all the data sources and assumptions and the calculations were correct to the proposed JCM project;
- All assumptions and data used by the PPs were listed in the PDD, including their references and sources; and
- All values used in the PDD were considered reasonable in the context of the proposed JCM project.

C.5. Environmental impact assessment

<Means of validation>

The proposed project is to install 3 ton/hour once through boiler to the existing golf ball factory and the PDD stated that an environmental impact assessment is not required by laws of the host country. The validation team assessed the applicable legal requirements in the host country using its local expertise.

The details of the persons interviewed and documents reviewed are provided in the Section E of this report.

<Findings>

Please state if CARs, CLs, or FARs are raised, and how they are resolved.

No issue was raised to the requirements of this section.

<Conclusion based on reporting requirements>

Please state conclusion based on reporting requirements.

The validation team confirmed by assessing the relevant documents and using the local sources/expertise that an environmental impacts assessment has been conducted following the host country procedures and the PDD satisfies the requirements of the JCM.

C.6. Local stakeholder consultation

<Means of validation>

The PPs identified staff of PT Sumi Rubber Indonesia, officials from the central and local governments as the main local stakeholders and held a consultation meeting. Representatives of the local stakeholders attended the meeting provided comments mainly related to the implementation of the project and no negative issue was raised through the process.

The details of the persons interviewed and documents reviewed are provided in the Section E of this report.

<Findings>

Please state if CARs, CLs, or FARs are raised, and how they are resolved.

No issue was raised to the requirements of this section.

<Conclusion based on reporting requirements>

Please state conclusion based on reporting requirements.

The validation team confirmed that the PPs have invited comments to the proposed project from the relevant local stakeholders, the summary of the comments received is provided in the PDD in a complete manner and the PPs have taken due account of all the comments received from the local stakeholders as the processes described in the PDD.

C.7. Monitoring

<Means of validation>

The MP consisting of the MPS and Monitoring Structure Sheet (MSS) is based on the approved methodology.

The amount of fuel consumption of project boiler is directly and continuously measured by a fuel flow meter.

The roles and responsibilities of the persons are described in the MSS in accordance with the requirements of the applied methodology. The reading results of fuel flow meter are recorded, monthly checked by the responsible staff and checked the integrity on a monthly basis.

The validation team confirmed that the MP complied with the requirements in the approved methodology and that the PPs will be able to apply the MP following the monitoring arrangements described in it.

CL 3 was issued that the details of resolution are as described below.

The details of the persons interviewed and the documents reviewed are shown in the Section E of this report.

<Findings>

Please state if CARs, CLs, or FARs are raised, and how they are resolved.

Grade / Ref: CL 3

Nature of the issue raised: The PPs were required to clarify the responsible person assigned for monitoring activities, to ensure quality of the monitoring report and to manage the monitoring points, maintain and control the measuring instruments including calibration/regular inspection at the monitoring points.

Nature of responses provided by the PPs: The PPs submitted the revised MSS for review by the validation team.

Assessment of the responses: The validation team reviewed the revised MSS and confirmed assignment of relevant responsibility.

The CL was closed.

<Conclusion based on reporting requirements>

Please state conclusion based on reporting requirements.

The validation team confirmed that the MP was described in compliance with the requirements of the approved methodology and the Guidelines for developing PDD and MR, and the PPs have demonstrated feasibility of the monitoring structure and their ability to implement the MP.

C.8. Modalities of Communication

<Means of validation>

The MoC was submitted to LRQA in the form JCM_ID_F_MoC_ver01.0. The MoC nominates Sumitomo Rubber Industries, Ltd. as the focal point entity and was signed by the authorized representatives of all the PPs with the contact details. The form used is the latest one as of the time of validation. The validation team assessed through reviewing the written confirmation from the PPs. The written confirmation was issued by authorised person of the PPs, and it confirms that all corporate and personal details including specimen signatures are valid and accurate as requested in the JCM Guidelines for Validation and Verification. The validation team also confirmed through reviewing the corporate information of the PPs and by meeting the persons representing the PPs that the information provided in the MoC is correct.

Through the processes taken, the validation team raised CAR 2 as below.

The details of the persons interviewed and the documents reviewed are shown in the Section E of this report.

<Findings>

Please state if CARs, CLs, or FARs are raised, and how they are resolved.

Grade / Ref: CAR 2

Nature of the issue raised: The MoC Statement Form was not correctly completed on the below points.

1) Date of submission was not filled in the Section 1.

2) The Section 3 was not filled with information of the TPE.

The PPs were also required to provide evidence to confirm the information and specimen signature filled in the MoC Statement Form was correct.

Nature of responses provided by the PPs: The PPs submitted the revised MoC and confirmation letters from all the PPs for review by the validation team.

Assessment of the responses: The validation team reviewed the revised MoC and the supporting evidence and confirmed the form has been completed and relevant evidence has been submitted by the PPs.

The CAR was closed.

<Conclusion based on reporting requirements>

Please state conclusion based on reporting requirements.

The validation team confirmed that the MoC was completed using the latest form after assessment conducted on relevance of the MoC in compliance with the requirements of the JCM Guidelines.

C.9. Avoidance of double registration

<Means of validation>

The validation team assessed and confirmed relevance of the written confirmation in the MoC from the PPs that the proposed JCM project was not registered under the other international climate mitigation mechanisms.

The team in addition to the interviews with the PPs checked publicly accessible information of Clean Development Mechanism (CDM), Joint Implementation (JI), Verified Carbon Standard (VCS) and Gold Standard (GS) and found no identical project as the proposed JCM project in terms of the name of entities, applied technology, scale and the location. The result of researches confirmed that the proposed project was not registered under the other international climate mitigation mechanisms than JCM and it will not result in a double counting of GHG emission reductions.

The details of the persons interviewed and the documents reviewed are shown in the Section E of this report.

<Findings>

Please state if CARs, CLs, or FARs are raised, and how they are resolved.

No issue was raised to the requirements of this section.

<Conclusion based on reporting requirements>

Please state conclusion based on reporting requirements.

The validation team confirmed that the proposed JCM project was not registered under the other international climate mitigation mechanisms.

C.10. Start of operation

<Means of validation>

The start date for the operation of the proposed JCM project is indicated in the PDD as 01/07/2016.

The validation team confirmed correctness/relevance of the information by reviewing the supporting evidence, including but not limited to assessing of the contracts and commissioning report, and that the date is not before 01/01/2013 as required to be eligible as a JCM project.

<Findings>

Please state if CARs, CLs, or FARs are raised, and how they are resolved.

No issue was raised to the requirements of this section.

<Conclusion based on reporting requirements>

Please state conclusion based on reporting requirements.

The validation team confirmed that the start date of operation of the proposed JCM project is 01/07/2016 and not before 01/01/2013 as required to be eligible as a JCM project.

C.11. Other issues

<Means of validation>

No issue was identified as relevant element not covered above.

<Findings>

Please state if CARs, CLs, or FARs are raised, and how they are resolved.

Not applicable

<Conclusion based on reporting requirements>

Please state conclusion based on reporting requirements.

Not applicable

D. Information on public inputs

D.1. Summary of public inputs

In line with the JCM Project Cycle Procedure, the PDD is to be made publicly available for 30 days to invite public comments. The PDD was made publicly available in line with the requirements of the procedure for the period of 25/03/2019 to 23/04/2019 as per https://www.jcm.go.jp/id-jp/projects/63.

D.2. Summary of how inputs received have been taken into account by the project participants

No comment was received during the above period to receive public inputs.

Thus no action was required to be taken by the PPs to satisfy the JCM requirement.

E. List of interviewees and documents received

E.1. List of interviewees

PT Sumi Rubber Indonesia

Rajinder Singh, General Manager, Golf Ball Factory

Yoshiki Nakai, General Manager, Engineering

Tulus M., Project Manager, Golf Ball Factory 2

Akmal, Engineering

Istiyanto, Staff, Safety

Sarjianto, Staff, Environment

Fuhendri M., SPV, Environment

Ounur Rotiq, Foreman, Engineering Maintenance Hilm An, Staff Utility Sri Karyoto, SPV, Utility Engineering Nippon Koei Fumiya Hayashi, Dept. Environmental Science and Engineering

E.2. List of documents received

Category A documents (documents prepared by the PP) - PDD Version 1.0 dated 30/10/2018 with the monitoring spreadsheet - Revised PDD Version 2.0 dated 03/04/2019 with the monitoring spreadsheet - MoC - Revised MoC dated 18/03/2019 - Proposal of Boiler for PT. Sumi Rubber Ind., Mini Circulation Boiler - Boiler Commissioning Data - Completion Report of Project (Boiler and RO System) - Contract/PO for Boiler Installation - Yearly maintenance for Boiler of JCM project by PT Gikoko - Commissioning of RO - Project implementation plan - Boiler specification - Boiler data - Boiler inspection checklist - Calibration - Commissioning Report of Boiler - Useful lifetime based on the act of Japan’s Ministry of Finance for calculation of useful lifetime for depreciation and amortization - Applicable national regulations to the measurement of fuels and calibration of fuel flow meters - The latest environmental permit - Meeting Minutes of local stakeholder consultation meeting dated - List of LSC attendees - Boilers operation records - Administrative procedures for ordering periodical boiler maintenance - Confirmation letter on periodical maintenance of boiler from PT. Gikoko

- Confirmation of MoC from PT Sumirubber Indonesia, Sumitomo Rubber Industries, Ltd. and Nippon Koei Co., Ltd.

Category B documents (other documents referenced)
- JCM_ID_AM015_ver01.0 Energy Saving by Introduction of High Efficiency Once-through Boiler, Version 01.0
- Additional Information for the Proposed Methodology “Energy Saving by Introduction of High Efficiency Once-through Boiler”
- JCM Project Cycle Procedure JCM_ID_PCP_ver05.0
- JCM Guidelines for Validation and Verification JCM_ID_GL_VV_ver01.0
- JCM Guidelines for Developing PDD and MR JCM_ID_GL_PDD_MR_ver03.0
- JCM Glossary of Terms JCM_ID_Glossary_ver01.0
- JCM PDD Form JCM_ID_F_PDD_ver02.0
- JCM MoC Statement Form JCM_ID_F_MoC_ver01.0
- JCM Validation Report Form JCM_ID_F_Val_Rep_ver01.0
- Proposed and registered projects under CDM, VCS, Gold Standard, and the other international schemes

Annex Certificates or curricula vitae of TPE's validation team members, technical experts and internal technical reviewers

Please attach certificates or curricula vitae of TPE's validation team members, technical experts and internal technical reviewers.

Certificate of Appointment is attached to this report.

Joint Crediting Mechanism Certificate of Appointment

Title of Project: Introduction of High Efficiency Once-through Boiler in Golf Ball Factory

We hereby certify that the following personnel have engaged in the validation process that has fully satisfied the competence requirements of the validation of the JCM project.

Name of Person	Assigned Roles
Michiaki Chiba	Team Leader
Cholid Bafagih	Team Member
Xianxin Yan	Technical Reviewer

Signed by

[redacted]

Michiaki Chiba
Climate Change Manager – Asia & Pacific
29/01/2019