



# Product Certification of MRB Fertilizer for Rubber Cultivation: Application for Certification



**MALAYSIAN RUBBER BOARD**  
**Stesen Penyelidikan RRIM Sg. Buloh**  
**Bangunan IRPEC, Lembaga Getah Malaysia**  
**47000 Sungai Buloh, Selangor**  
Regulatory and Quality Assurance Programme  
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## 1. Scope

### 1.1 Formulation

1.1.1 The certification of MRB Rubber Fertilizer is restricted to compound fertilizer\* manufacturer located within the country. There are three (3) formulations fertilizer to be certified:

a) Immature rubber trees

i. RRIM Mag X

Formulation : 8.4% N, 14.4% P<sub>2</sub>O<sub>5</sub>, 7.2% K<sub>2</sub>O, 2.1% MgO

Usage : 1 to 3 years old rubber tree

ii. RRIM Mag Y

Formulation : 10.7% N, 10.4% P<sub>2</sub>O<sub>5</sub>, 7.2% K<sub>2</sub>O, 2.1% MgO

Usage : 4 years old rubber tree up to maturity

b) Mature rubber trees

i. RRIM J

Formulation : 9.5% N, 11.9% P<sub>2</sub>O<sub>5</sub>, 13.2% K<sub>2</sub>O

\*Note 1: Compound fertilizer is defined as containing two or more of the major plant nutrients that are chemically and integrally mixed to produce a homogenous product.

### 1.2 Sources

1.2.1 The sources for production of all fertilizer shall be as listed in the table below:

Nutrient	Sources		
	RRIM Mag X	RRIM Mag Y	RRIM J
N (Nitrogen)	Ammonium Sulphate	Ammonium Sulphate	Ammonium Sulphate
P <sub>2</sub> O <sub>5</sub> (Phosphate)	Water soluble phosphate (Water soluble phosphate more than 90%)	Rock Phosphate (2 % citric acid soluble phosphate as P <sub>2</sub> O <sub>5</sub> should be more than 8 %)	Rock Phosphate (2 % citric acid soluble phosphate as P <sub>2</sub> O <sub>5</sub> should be more than 8 %)
K <sub>2</sub> O (Potassium Oxide)	Muriate of Potash (KCl)	Muriate of Potash (KCl)	Muriate of Potash (KCl)
MgO (Magnesium Oxide)	Kieserite	Kieserite	N/A

1.2.2 For certification purposes, the source of P<sub>2</sub>O<sub>5</sub> (Phosphate) shall be sampled and tested following MS 417 Part 4.

1.2.3 For other nutrients, the manufacturer need to provide evident such as certificate of analysis (COA) from supplier for MRB verification during surveillance inspection.

1.2.4 Sources should not content heavy metal element and will be monitored by MRB for future reference.

## **2. Product Certification System Type**

- 2.1 MRB uses ISO System No. 5 as the certification scheme. Under this system, certification is granted only if the product meets with the specified standard and market surveillance to ensure continuous compliance with the standard.
- 2.2 The ISO System No. 5 involves types of testing and assessment of factory quality management system and its acceptance followed by surveillance that takes into account the assessment of factory quality management system and testing of samples from the producer.

## **3. General Requirements of Certification**

### **3.1 Certification Procedures**

- 3.1.1 Fertilizer producer who wishes to have its product certified by MRB need to apply to the Product Certification Secretariat by using the application form issued by MRB, a copy of which is shown in Attachment 1.
- 3.1.2 In addition to comply with the General rules governing the MRB Product Certification system (see Product Certification: MRB – PCB – 01: Rules Governing Rubber Product Certification), producers applying for certification are also required to conform to the following:
  - a) Provide all necessary information required by the MRB for the purpose of evaluation of the product(s) to be certified. Applicants may be required to provide documentary proof that their productions are technically capable in meeting the specified Fertilizer specification.
  - b) Provide documentary evidence that the certificate of quality management system obtained from accredited certification body.
  - c) Pay all relevant application fees to the MRB.
  - d) Allow the MRB PC (Product Certification) inspector to collect samples for the evaluation process. There should be no interference on the part of the applicant in terms of how random samples are selected by the MRB PC inspector.
  - e) Samples may be taken at any point after packaging from the production line and samples may also be taken at export points or from the market.
  - f) While all information supplied by the applicant shall be treated with utmost confidentiality by the MRB, the applicant shall permit the MRB to use and release whatever information obtained in the course of the application to the public or government authorities as deemed proper and necessary by the MRB, or as required by existing law or regulation.
- 3.1.3 On receipt of the application, the Product Certification Secretariat (PCS) will provide a written acknowledgement to the applicant, if all fees have been received and all information required is in order.
- 3.1.4 MRB will inform the applicant with regard to an inspection to the factory for the purpose of certification assessment. Satisfy with the assessment, the applicant shall be issued

a certificate of conformity. There are maximum of three (3) re-assessment carried out during certification process, failing which, the applicant need to submit new application form together with the application fee.

3.1.5 The successful applicants shall also be permitted to use the MRB Conformity Mark on their product and/or packaging. The approved applicant shall be registered and added to the certified supplier list (which may be made public and each certification shall be address-specific). The Product Certification Committee (PCC) shall have access to this list at any time.

3.1.6 The detail of the certification process is shown in Attachment 2.

### 3.2 Product Sampling

3.2.1 Sampling method will be based on MS 417:1994.

3.2.2 Sampling apparatus

- a) A non-corrosive (brass, copper or stainless steel) slotted grain probe of sufficient length to penetrate the whole bag diagonally. The probe shall have a continuous slot with sharp edges.

The dimensions of a typical probe shall be:

- |  |                    |
|--|--------------------|
| i. Length, exclusive of handle 650 mm (min.) | 650mm              |
| ii. Slot length                              | 92% of 3.2.2 a) i. |
| iii. Slot width                              | 13 mm              |
| iv. Inner diameter                           | 16 mm              |

- b) A sample probe as shown in Figure 1 shall be used.

- c) Airtight containers which are inert to the material.

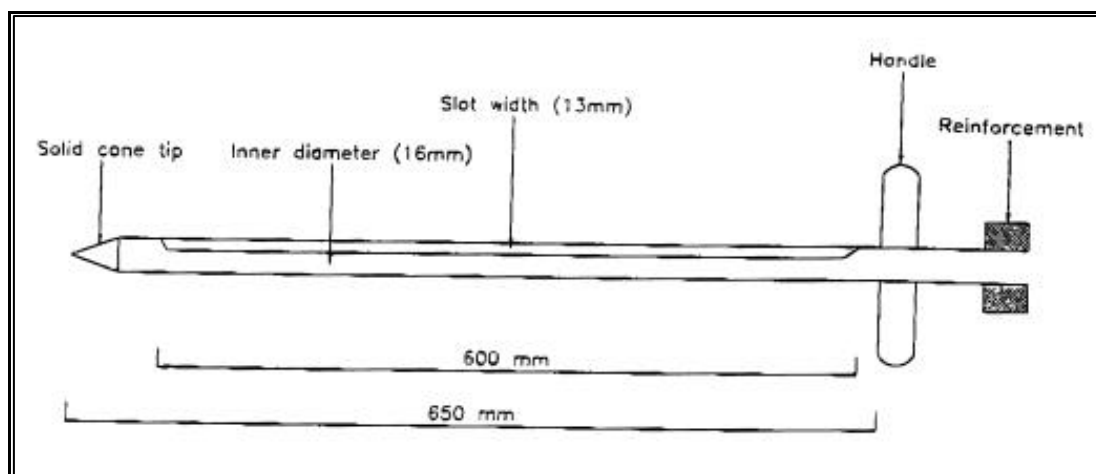


Figure 1: Fertilizer sample probe

### 3.2.3 Sampling of fertilizer

- a) Representative samples shall be obtained in accordance with Table 1.

Table 1: Scale of sampling and method of selection

Lot size (bag)	Sample size (bag)	Method of selection
1 – 3	All	At random
4 – 15	3	
16 – 50	10	
51 – 150	15	
151 – 500	25	
501 – 2000	35	

- i. If the lot size exceeds 2000 packages, the sampling cycle is repeated.
  - ii. All packages in a single consignment of the material of the same grade and type, drawn from a single batch of manufacture shall constitute a lot. If a consignment is declared to consist of different batches of manufacture, the batches shall be marked separately and the groups of packages in each batch shall constitute separate lots. In the case of a consignment drawn from a continuous process, 2000 packages (or 100 tonnes) of the material shall constitute a lot.
  - iii. The number of packages to be chosen from a lot shall depend on the size of the lot and shall be as given in Table 1.
- b) The packages selected shall be intact and in good external condition. From each of these packages laid horizontally take a full length diagonal core from bottom corner to top corner or from two opposite corners as shown in figure 2 using the non-corrosive probe. Mix the cores thoroughly to form a representative sample and store in an airtight container.

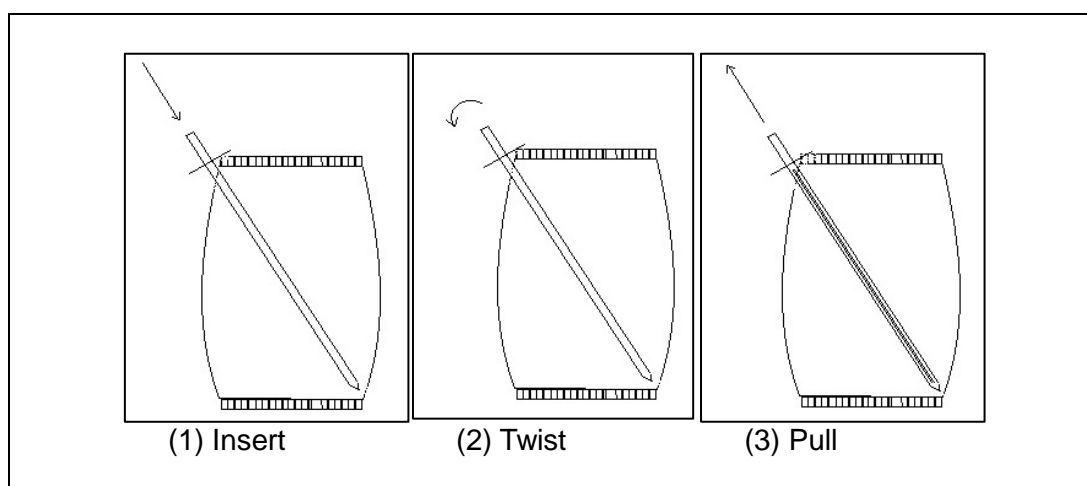


Figure 2: Slotting the Sample from the bag

- c) When slotting into the bag the slot shall be faced down. When the probe has fully penetrated, turn 180° so that the slot faces upward and is filled before pulling out the probe.
- d) Sampling of fertilizer will be carried out at the applicant's premises, there should

be documentary evidence that operators carrying out the sampling are trained and competent. The sampling activities shall be supervised by MRB PC Inspector and the equipment used for the test is regularly maintained.

### 3.3 Product Testing

#### 3.3.1 Preparation of sample for analysis

- a) Transfer the collected sample described in Clause 3.2.3 is reduced to about 250g using “the cone and quarter technique” as shows below:
  - i. This technique involves pouring the sample into a cone, flattening the cone, dividing the flattened cone into four equal divisions (quartering), and then removing 2 opposite quarters (Figure 3).
  - ii. The remaining two quarters are re-piled into a cone and the process is repeated until the desired sample size is obtained.
- b) Transfer to a non-corrodible container provided with an airtight closure.
- c) The grounded sample is then sub-sampled for laboratory analysis.

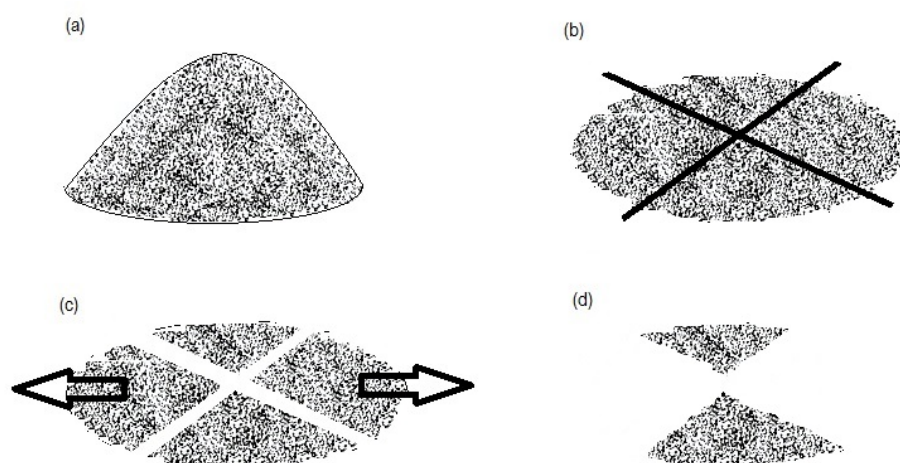


Figure 3: The cone and quarter technique.

- 3.3.2 Each of the samples collected shall be tested for the following specification as listed below:

Table 2: Testing Parameter

No	Testing parameter	Test Method
1.	Nitrogen content	MS 417 Part 3
2.	Phosphorus content	MS 417 Part 4
3.	Potassium content	MS 417 Part 5
4.	Magnesium content	MS 417 Part 6
5.	pH	MS 49

3.3.3 Samples shall be tested at Laboratories which is accredited to ISO/IEC 17025 or recognized by Agriculture Laboratory Association of Malaysia (AgLAM).

3.3.4 The test result shall conform to the specifications in Table 3 below:

No	Parameters	Maximum Permissible tolerance	Minimum Requirement,		
			RRIM Mag X	RRIM Mag Y	RRIM J
1.	Nitrogen (N), %	-8%	7.73	9.84	8.74
2.	Phosphorus (P <sub>2</sub> O <sub>5</sub> ), %	-8%	13.25	9.57	10.95
3.	Potassium (K <sub>2</sub> O), %	-8%	6.62	6.62	12.14
4.	Magnesium (MgO), %	-0.5	1.60	1.60	N/A
5.	Sum of declared formulation	-5%	30.49	28.88	32.87
6.	pH	N/A	4.5		

### 3.4 Surveillance Inspection

3.4.1 Successful certified producers shall be subjected to the MRB surveillance program, which will be carried at least twice a year. All surveillance shall be announced and producer need to inform MRB on the availability of certified fertilizer.

3.4.2 Samples are to be marked by the MRB PC inspector personnel and sent to the laboratories.

3.4.3 All test results of the surveillance inspection will be sent to the producer. If the batch pass the specifications, it can be distributed as MRB certified fertilizer.

3.4.4 Any failure will cause the producer to receive a warning letter. The batch which fail the test will be rejected. The producer shall immediately cease to label affected product with the Certification Mark and not made any further reference to its certified status. Producer shall take necessary corrective action and submit the report to MRB for verification.

3.4.5 Any producer whose product does not meet the technical specification after the verification inspection shall face the consequences of termination of certification.

3.4.6 The batch which has been sampled under surveillance inspection shall be excluded from routine inspection procedures.

3.4.7 Detail of MRB Rubber Fertilizer surveillance inspection process flow can be referred to Attachment 3.

### 3.5 Routine inspection

3.5.1 Successful certified producers shall be subjected to conduct routine inspection to all certified fertilizer produced to ensure continuous compliance with the specified standards.

3.5.2 The sampling method shall follow as stated in 3.2 and 3.3.

- 3.5.3 A copy of all test results shall be sent to MRB for verification and reference purposes.
- 3.5.4 The batch which fail the test will be rejected and shall immediately cease to label affected product with the Certification Mark and not made any further reference to its certified status. Producer shall take necessary corrective action and submit the report to MRB for verification.
- 3.5.5 Detail of MRB Rubber Fertilizer routine inspection flow can be referred to Attachment 4.

### **3.6 Market Surveillance**

- 3.6.1 Market surveillance will be conducted at least once a year and any charges incurred will be charged to the producer accordingly. The sample will be taken within 1 year after manufacturing date.
- 3.6.2 If fail, the producer will be notified and shall provide explanation (on investigation of root cause, corrective and preventive action taken) within 14 days failing which, the certification status will be terminated and a recall system shall be activated by the producer.
- 3.6.3 Detail of MRB Rubber Fertilizer Market Surveillance flow can be referred to Attachment 5.

### **4. Amendment to Scope of Certification**

- 4.1 A certified producer may at any time make a formal application to the MRB to amend its scope of certification, e.g. increase/reduction of scope, using the appropriate form (refer attachment 6) available from the Product Certification Secretariat. The MRB will decide on the action necessary in response to the request, which may require a new or additional evaluation. The application shall be informed in writing on the action taken by the MRB regarding the application.

### **5. Use of the Mark of Conformity**

- 5.1 Certified producers are permitted to use Mark of Conformity on their products and/or product packaging (where appropriate) and make reference to their certified status. The mark detailing the information of the producer and demonstrate that such products meet with specified standard(s)/specifications.
- 5.2 Where practicable, Mark of Conformity shall be reproduced in the form as detailed in Figure 4 and Figure 5. Any enlargements or reductions shall retain the same proportions but shall be sufficiently large for the wording to be clearly legible.
- 5.3 Mark of Conformity may be imposed on products and/or their smallest units of packaging (where appropriate) in whichever manner deemed practicable, and shall be applied together with certification code to whom the product is certified to.





Figure 4: Mark of Conformity

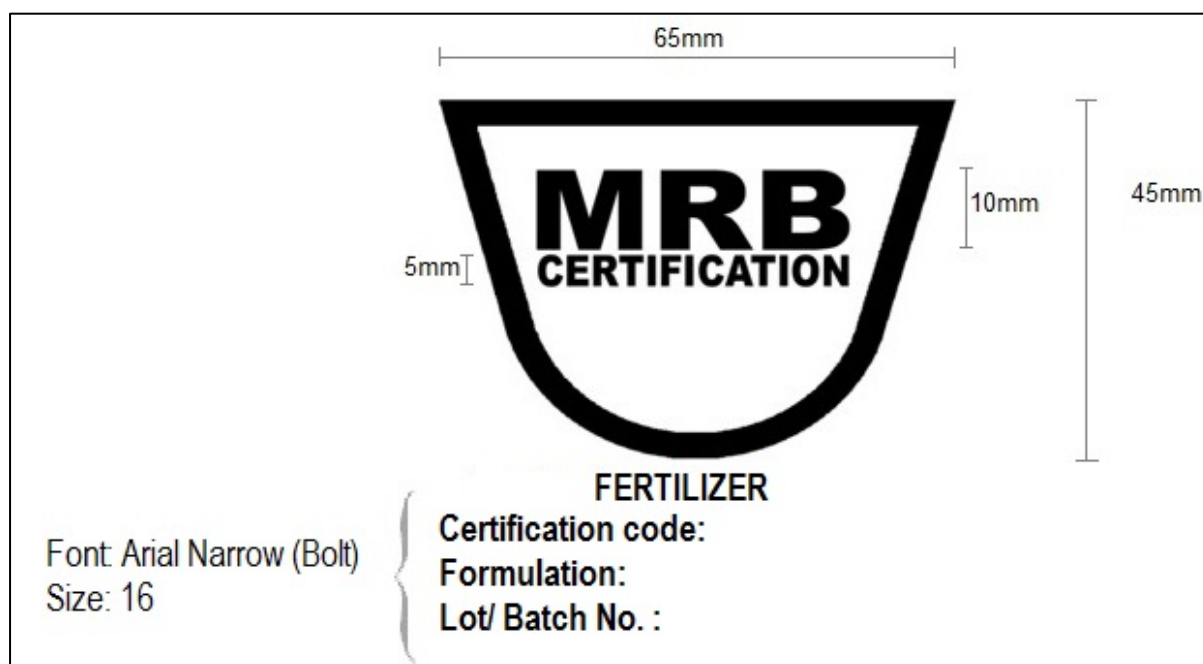


Figure 5: Size and dimension guideline for Mark of Conformity

## 6. Packaging

- 6.1 Every packaging shall be identified, traceable and marked as indicated in Figure 4.
- 6.2 Manufacturing date shall be printed clearly on the packaging.

## **7. Cancellation and Withdrawal of the Certificates**

- 7.1 If the certification of a product is terminated (cancelled/withdrawn), the following actions shall be undertaken immediately by the producer:
- a) The producer shall immediately cease to label any product with the Mark of Conformity and certification code and not made any further reference to its certified status.
  - b) The producer shall surrender the valid certificate to the MRB.
  - c) The MRB has the right to publicise the name of product (and its producer) which has been suspended or has its certified status withdrawn. Likewise, the MRB will notify when suspension on a particular product (producer) has been lifted.
- 7.2 The MRB reserves the right to take appropriate action, including legal ones, against any producer who violates the above rules during the period of certification, or after the certification has been withdrawn.

## **8. Charges**

- 8.1 The certification shall be charged by the certification body as per Attachment 7.

MALAYSIAN RUBBER BOARD



APPLICATION FOR PRODUCT CERTIFICATION  
BY USE OF CERTIFICATE AND/OR MARK OF CONFORMITY

**TO: Regulatory & Quality Assurance Program,  
Malaysian Rubber Board  
Bangunan IRPEC,  
Stesen Penyelidikan RRIM, Sungai Buloh,  
47000 Sungai Buloh,  
SELANGOR DARUL EHSAN**

Information regarding the applicant;

1. Name of Company


2. Official Address


Telephone  
Fax  
E-mail


3. Manufacturing Address of the Product (if different from 1 and 2)


Telephone  
Fax  
E-mail


4. Company Registration Number


Contact Person

Designation of product for which Product Certification is sought

Product	Relevant Standard (s)/Specification

5. Quality Management System

Please state (✓) the quality management system implemented by your company

ISO 9001  FDA QSR  EN 46002

Others (please specify)

Please indicate the year of implementation

6. Warehouse Information

Please provide the following information (if applicable) in the space provided	
Number of plants within the same premises (for 1 above)	
Number of warehouses within the same premises (if more than one)	
Names and addresses of plants under the same management in Malaysia	
Number of plants within the same premises (if more than one)	
Number of warehouses within the same premises (if more than one)	
Name and addresses of plants under the same management overseas	
Number of plants within the same premises at each site	
Number of warehouses within the same premises (if more than one)	

Particulars for 6


7. Contract Suppliers

Do you have any contract suppliers	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
If yes, do they all have a recognised quality system of at least ISO 9001?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
If yes, are they all certified to the MRB Product Certification Program?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>

8. We hereby agree to:

- a. to make a payment for the certification upon receiving invoice from MRB
- b. ensure the product manufactured and the manufacturing process comply with the relevant standard(s) and other product certification requirements.
- c. allow authorized MRB Product Certification personnel free access (together with factory representative factory, store and godown and to our office (records of production or other relevant documents).
- d. allow authorized MRB Product Certification personnel to access and carry out random sampling in our premises.
- d. temporarily suspend the export/local sale of any MRB certified product if instructed to do so by an MRB Product Certification Personnel.
- e. the opening at ports or elsewhere, marked as MRB Certified Product for inspection or otherwise.
- f. allow MRB Product Certification Personnel to inspect our productions at any time, either announced or unannounced.
- g. keep the MRB informed of any changes in the particulars given above and/or in the details of production, including processing changes and/or quality system.
- h. ensure that MRB certified product shipments are only made when we have a valid MRB Certificate of Conformity.
- i. abide by the rules and regulations contained in the document,Product Certification: MRB-PCB-01 General Rules Governing Product Certification, including those pertaining to the use of mark and certificate of conformity and the logo.
- j. sign the MRB Product Certification Agreement before grant of certification licence.

I/We\* understand the term and conditions on certification requirements

9. I/We\* declare that to the best of my/our\* knowledge and belief all the information given is true and correct and tha I/we\* understand that if any of the information given if found not to be true and correct this application will be refused and any certification awarded shall be declared null and void.

10. Date of application.....

11. Name and title of person authorized to sign on behalf of the applicant

.....

.....

.....

.....

.....

Signature:.....

\* Delete whichever is not applicable

**FOR OFFICE USE ONLY**

Received Date : .....

Received Payment Date : .....

- 1. Client information is sufficient
- 2. Product information is sufficient
- 3. No Difference in Understanding Between the MRB and the Client
- 4. The scope of certification sought is defined
- 5. The means are available to perform all evaluation activities
- 6. MRB has the competence and capability to perform the certification activity.

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
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Review by :  
.....

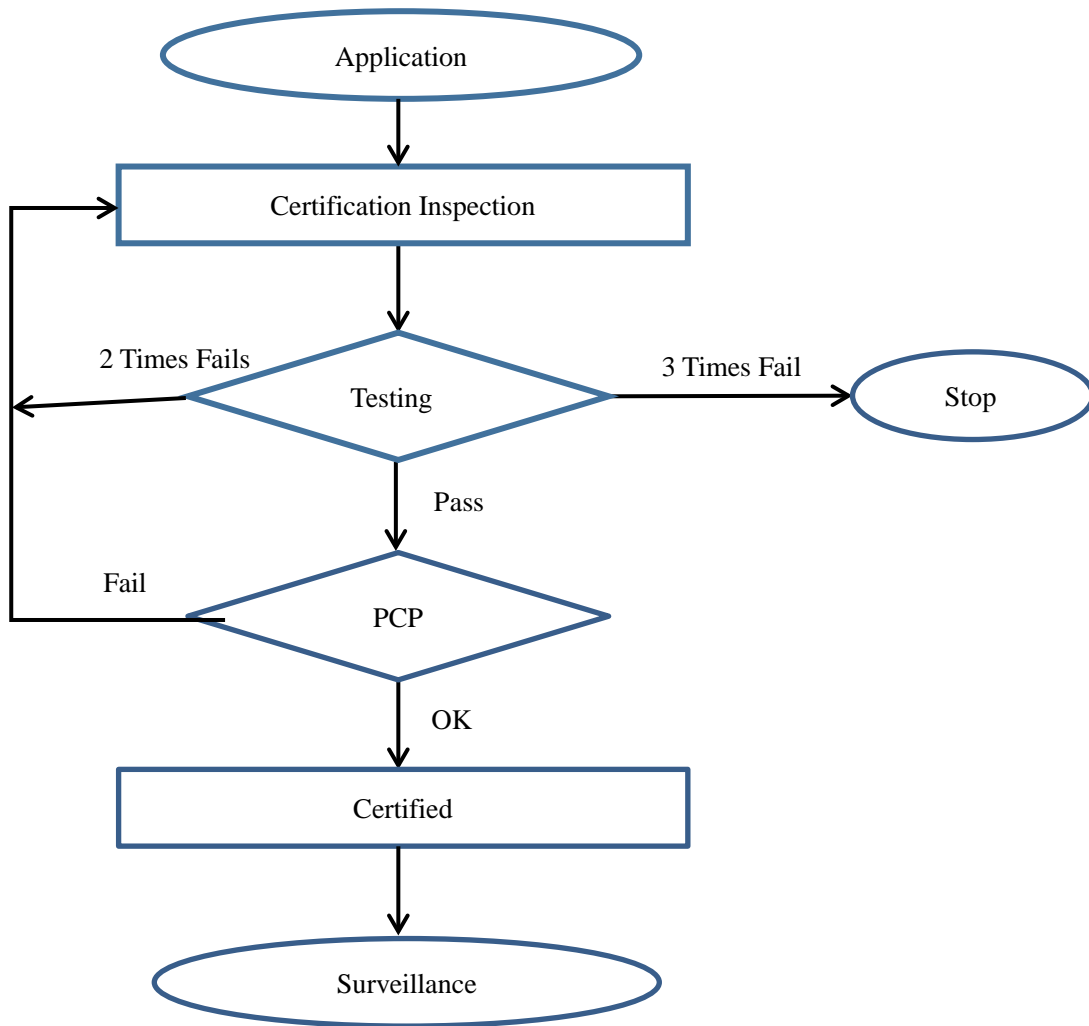
Approve by :  
.....

Inspection Date : .....

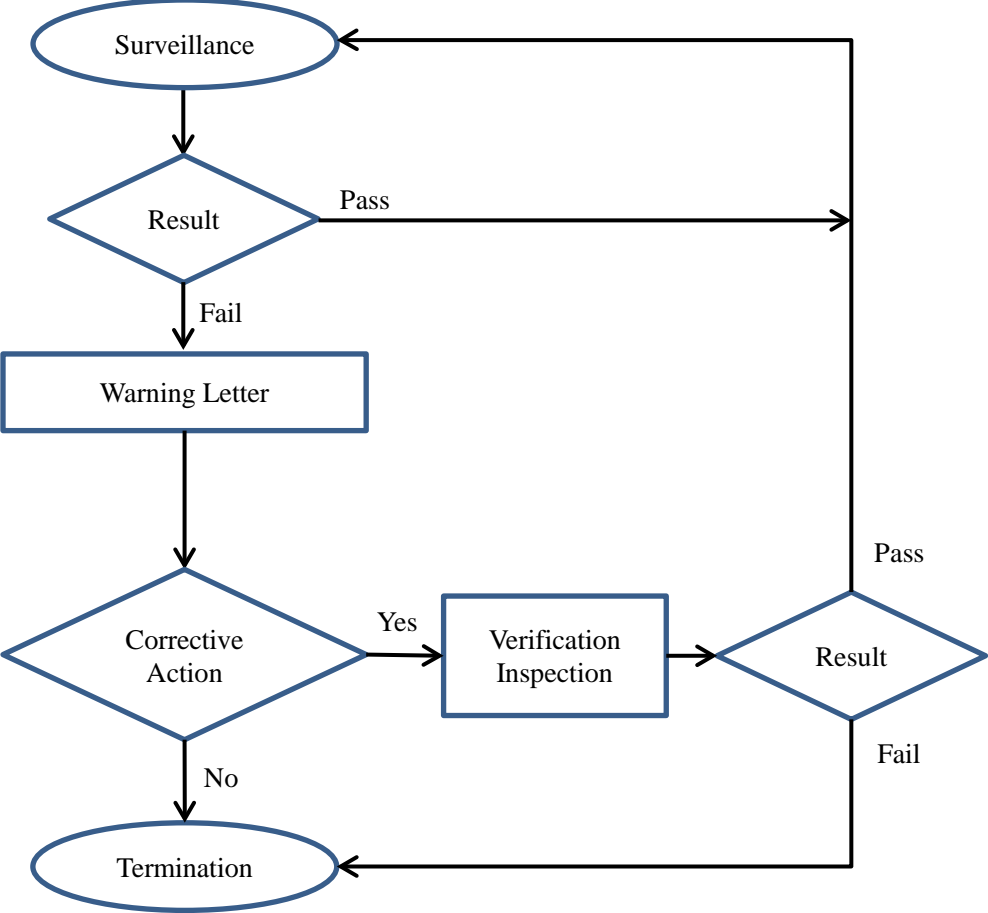
Team Leader : .....

PC Inspector : .....

## Attachment 2: Fertilizer for Rubber Tree Certification Flow Chart

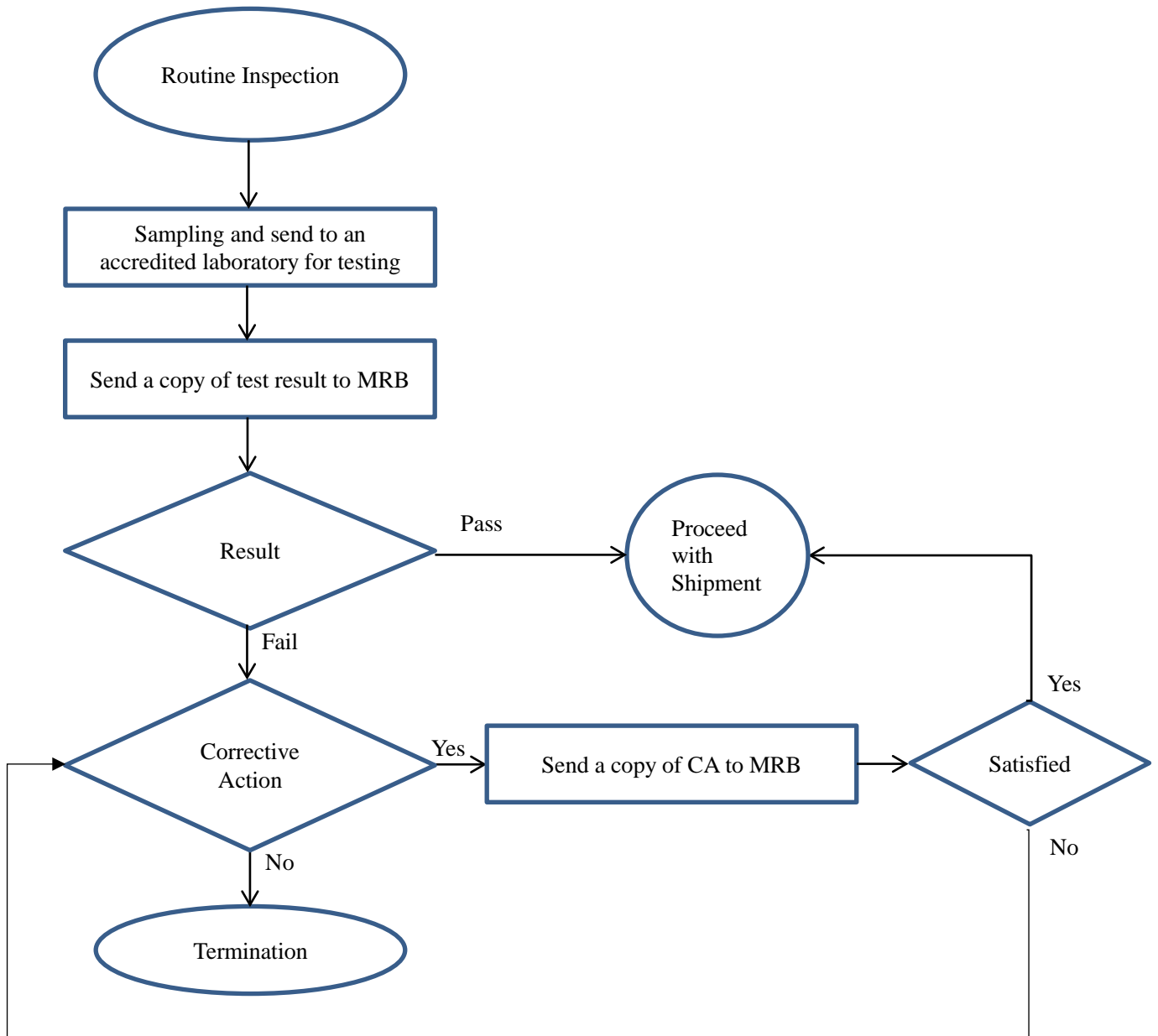


**Attachment 3: Surveillance Inspection Flow Chart**

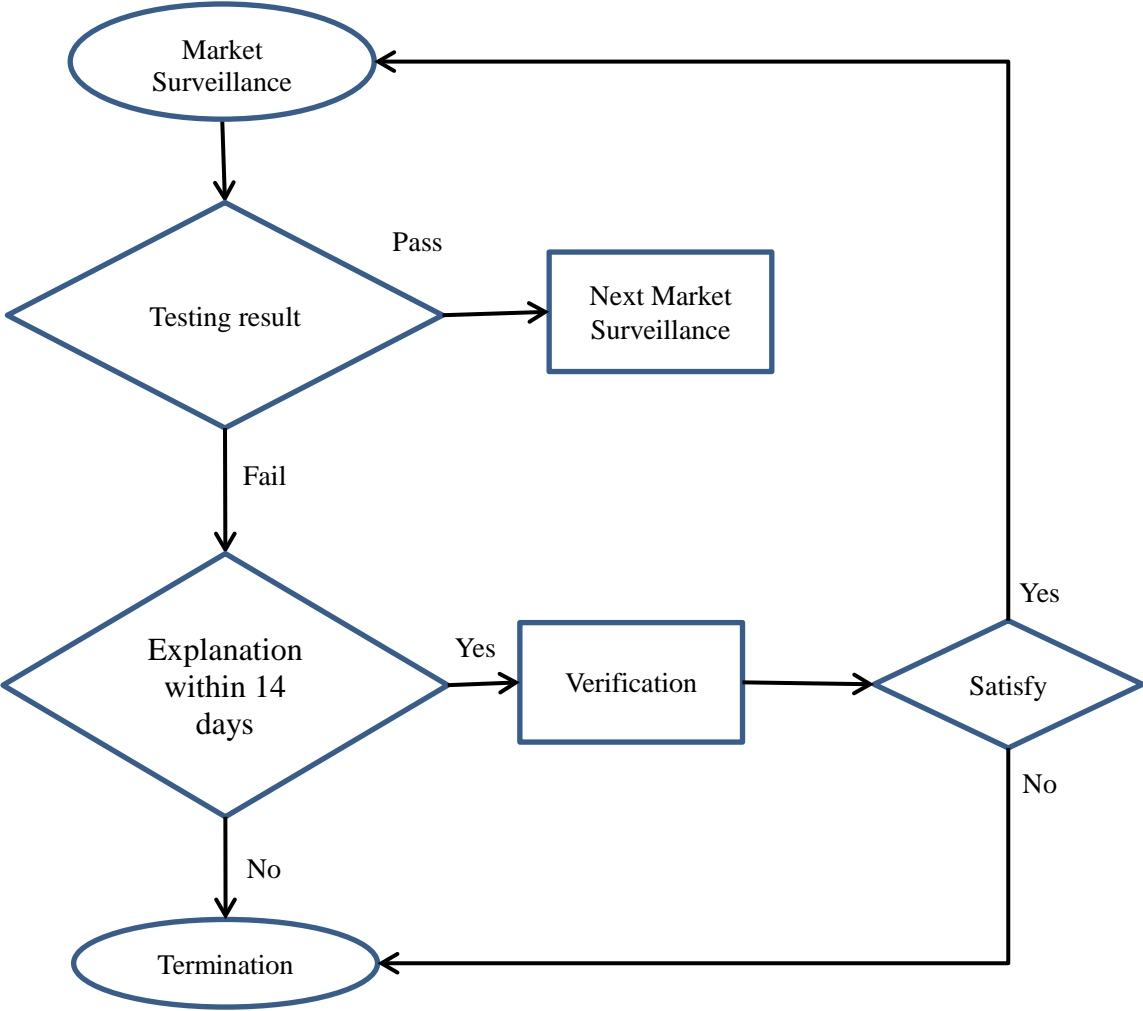




### Attachment 4: Routine Inspection Flow Chart



**Attachment 5: Market Surveillance Flow Chart**



# MALAYSIAN RUBBER BOARD Product Certification Program

## Application for Change (extension/reduction) of Scope of Certification

Name of Certified Producer: .....

Address: .....  
.....  
.....

Contact Person: .....

Designation: .....

Tel: ..... Fax: .....

Current scope of certification	Scope of certification sought/ reduced

Signature: ..... Date: .....

=====

### FOR OFFICE USE ONLY

Received Date : .....

- 1. Client information is sufficient ( )Yes ( )No
- 2. Product information is sufficient ( )Yes ( )No
- 3. No difference in understanding between the MRB and the Client ( )Yes ( )No
- 4. The scope of certification sought is defined ( )Yes ( )No
- 5. The means are available to perform all evaluation activities ( )Yes ( )No
- 6. MRB has the competence and capability to perform the certification activity. ( )Yes ( )No

Reviewed by: ..... Approved by : .....

Date of Inspection : .....

Team leader/ PC Inspector : .....

**Attachment 7: Fees and Cost of Testing for MRB Fertilizer for Rubber Cultivation**

**PRODUCT CERTIFICATION OF FERTILIZER FOR RUBBER TREE**

**FEES PAYABLE**

- One time application fee
  - RM 3,000.00
  
- Inspection fee (2 inspectors)
  - Peninsular Malaysia  
RM 3,000.00/ inspection
  
  - Sabah/ Sarawak  
RM 3,000.00/ inspection excluding travelling (aviation, land and maritime) and accommodation
  
- Renewal fee for each certificate per year (payable yearly one year after the issuance of Product Certification)
  - RM 500.00/ certificate
  
- Testing fee
  - RM 600.00/ sample