اءوتوريتي كبغسائن كسلامتن كصيحتن دان عالم سكيتر

Safety, Health and Environment National Authority

GUIDELINES ON RADIATION PROTECTION PROGRAMME (RPP) REQUIREMENTS

Rev. 1

ENSURING BRUNEI A SAFE PLACE TO WORK & LIVE

WWW.SHENA.GOV.BN

DOCUMENT HISTORY

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DISCLAIMER

CONTENTS

1. INTRODUCTION

The Safety, Health and Environment National Authority (**SHENA**) is a statutory body set up under the Safety Health and Environment National Authority Order, 2018. SHENA acts and enforces all matters relating to workplace safety, health and the environment as well as radiation within Brunei Darussalam. SHENA is headed by a Chief Executive Officer (**CEO**) reporting directly to the Minister in Charge (Minister at Prime Ministry Office) and responsible for the administration of the SHENA Act, Chapter 227.

2. OUR VISION, MISSION, KEY PRINCIPLES AND VALUES

2.1 SHENA Vision Statement

We are committed to making a difference and ensuring Brunei Darussalam is a safe place to work and live.

2.2 SHENA Mission Statement

We will maintain a robust fit for purpose national safety, health and environmental regulatory framework and ensure that the risks to people, assets and the environment are controlled in compliance with laws and regulations, set by the government, implemented by those who create the risk and underpinned by continuous improvement.

2.3 Principles

Our operational philosophy is governed by four key principles:

1. Structured
2. Auditable
3. Focused
4. Engaged

In all our activities we will ensure a transparent and open dialogue with all our stakeholders. Our stakeholders include industry, government, and the general public and our key principles apply equally to all.

2.4 Values

All our employees are expected to adopt key values in their day-to-day engagements. Our employees will demonstrate the following values in all aspects of our activities:

1. Integrity
2. Respect
3. Reasonability
4. Professionalism

3. PURPOSE

This document is created as guidelines for the licensee or applicants on the development of an RPP.

4. SCOPE

These guidelines outline the minimum regulatory requirements in developing the RPP, comprising the safety, security, and emergency aspects of the radiation activity to be conducted. In preparation for the RPP, the licensee or applicant must:

(i) Ensure the type of radiation activity to be engaged is clearly identified, including the list of radioactive material(s) and/or controlled apparatus (technical specifications to be provided) to be used;

(ii) Elaborate on the standard operating procedures for the conduct of the radiation activity to ensure the principles of radiation safety and security are in place;

(iii) Ensure the submitted RPP prepared for submission to SHENA is endorsed by the RPO and the licensee;

(iv) Ensure the RPP is reviewed at least once in two years, OR when there are changes to the particulars OR as directed by SHENA; and

(v) Ensure the cover page of RPP carries the information required by SHENA (refer to Appendix A).

These guidelines may be amended or varied by SHENA from time to time.

5. DEFINITIONS AND ABBREVIATIONS

In this guideline, the abbreviations for words are as follows:

(i)	ALARA	- As Low as Reasonably Achievable
(ii)	GRW	- General Radiation Worker
(iii)	NORM	- Naturally Occurring Radioactive Materials
(iv)	RPO	- Radiation Protection Officer
(v)	RPP	- Radiation Protection Programme
(vi)	SEM	- Scanning Electron Microscope
(vii)	TENORM	- Technologically Enhanced Naturally Occurring Radioactive Materials
(viii)	XRD	- X-Ray Diffraction
(ix)	XRF	- X-Ray Fluorescence

6. BASIC ELEMENTS OF A RADIATION PROTECTION PROGRAMME

A Radiation Protection Programme is expected to be comprehensive and comprises (but is not limited to) the following basic elements:

(i) Leadership and Management for Safety.
(ii) Roles and Responsibilities.
(iii) Worker Competency Programme.
(iv) Exposure Limit.
(v) Personal Monitoring Programme.
(vi) Health Surveillance.
(vii) Radiation Operating Procedures.
(viii) Quality Assurance.
(ix) Security Plan.
(x) Emergency Preparedness and Response.
(xi) Disposal Plan.
(xii) Record Keeping.
(xiii) Reference Documents.

These basic elements are further described as follows:

PART 1: LEADERSHIP AND MANAGEMENT FOR SAFETY

This Part is expected to clearly describe the business entity and the type of radiation activity involved whereby the following information is required to be provided:

(i) Background;
(ii) Vision and mission;
(iii) Organisation chart and departments dealing with radioactive materials and controlled apparatus;
(iv) Description of radiation activities;
(v) Inventory of radioactive material and controlled apparatus involved;
(vi) List of vessels involved in transporting radioactive material (if applicable);
(vii) List of monitoring dosimeter with the serial number;
(viii) Floor plan of exposure room and storage area of radioactive material and/or controlled apparatus; and
(ix) List of applicable guides and technical standards used.

PART 2: ROLES AND RESPONSIBILITIES

The roles and responsibilities of the relevant personnel (as reflected in the organisation chart required under Part 1 (Section 7) in section iii), shall be clearly described:

(i) Licensee (the person responsible for the licence);
(ii) RPO; and
(iii) GRW.

All registered RPOs and GRWs will be issued a radiation worker card with a validity date and are required to always wear the card when conducting work activities involving radiation. If the radiation worker lost the card, the Licensee or RPO shall submit an official letter of request for a replacement card with details of the radiation worker along with justification for the re-print of the card.

PART 3: COMPETENCY PROGRAMME

Licensees shall ensure new RPOs and GRWs undergo relevant radiation training conducted by training providers recognised by SHENA, in addition to any relevant in-house training prior to conducting radiation activities. The training programme shall have an emphasis on the following:

(i) Radiation Protection Act, Chapter 228;
(ii) Fundamental understanding of ionising radiation;
(iii) Responsibilities as a radiation worker;
(iv) Principles of radiation protection and clear demarcation of radiation designated areas;
(v) Main risks associated with ionising radiation;
(vi) Emergency preparedness and response in handling radiological accidents;
(vii) Remedial measures after a radiological incident or accident;
(viii) Emergency training (drill); and
(ix) Awareness of safety and security culture of working with radioactive materials and controlled apparatus in the facility.

For existing RPOs and GRWs, licensees shall establish an annual training plan for all radiation workers (at least once a year). The training courses shall be related to radiation activities undertaken by the workers.

Licensees shall provide information on the schedule plan for conducting an emergency drill to which SHENA is to be notified via email rademergency@shena.gov.bn at least one (1) month prior to the date of exercise.

PART 4: EXPOSURE LIMIT

The dose constraints for the relevant personnel shall be determined by the licensees, taking into consideration that the annual dose limit does not exceed 20mSv per year (refer to Appendix B). The purpose of using dose constraints is to optimise the protection and safety of workers, from which the intended outcome is to ensure all exposures are controlled to levels that are as low as reasonably achievable (**ALARA**).

If the annual dose limit is exceeded, the licensees shall carry out an internal investigation to determine the circumstances in which the exposure took place and its consequences. The investigation report shall be submitted to SHENA within thirty (30) days of the accident and/or incident via email at rademergency@shena.gov.bn.

The annual dose analysis records for all radiation workers shall be established and monitored by the licensees. For termination of radiation workers, the licensees shall submit an official letter to SHENA on the termination together with submission of the latest dose records and medical fitness report (refer to Appendix C).

PART 5: MONITORING PROGRAMME

The licensees shall describe the type of monitoring programmes for the demarcated radiation designated areas i.e. Controlled Area, Supervised Area and/or Clean Area.

The licensees shall provide personal dosimeters to all radiation workers for the purpose of occupational exposure assessment.

Personal dosimeters for all radiation workers shall be analysed by laboratories recognised by SHENA and monitored monthly. The dose records reporting must be in line with the template provided by SHENA (downloadable at the website: http://shena.gov.bn/) (refer to Appendix D).

All licensees conducting any radiation activities shall possess at least 2 units of suitable radiation detectors (with valid calibration certificates).

Environmental or area monitoring shall be conducted by the licensees (if requested by SHENA) by using a passive dosimeter and the monitoring result is to be submitted to SHENA quarterly.

The monitoring programme shall depend on the categorisation of radioactive materials and/or controlled apparatus used (refer to Appendix E) and radiation activities undertaken by the licensees (refer to Appendix F).

The licensees shall carry out an internal investigation to determine the circumstances in which overdose of radiation exposure occurred. The investigation report shall be submitted to SHENA within thirty (30) calendar days from the issue date of the laboratory report via email at rademergency@shena.gov.bn.

PART 6: HEALTH SURVEILLANCE

Licensees shall establish a health surveillance programme in ensuring all RPOs and GRWs are fit to work. Any person who is found to be medically unfit by a registered medical practitioner shall not be allowed to conduct radiation activities.

Licensees shall ensure that the health of RPOs and GRWs in their organization is reviewed regularly to determine whether such workers remain fit to perform their duties throughout their period of assignment. Medical records shall include records of all medical assessments (pre-employment, periodic and assessments at the termination of employment). The state of health of a worker shall be reviewed at least once in two years and more frequently if the radiation worker's exposure conditions and state of health requirement.

Restrictions on dealing with radiation activities shall be applied to pregnant women and breast-feeding mothers.

PART 7: STANDARD OPERATING PROCEDURES

The licensees shall provide information on the establishment of standard operating procedures for the following:

(i) Access to designated areas;
(ii) Use of personal and area monitoring equipment;
(iii) Maintenance of area and personal monitoring equipment;
(iv) Import and export of radioactive material and/or controlled apparatus;
(v) Transportation of radioactive materials (if applicable);
(vi) Calibration of controlled apparatus (if applicable);
(vii) Monitoring of the dose received by the patient (applicable to medical activity);
(viii) Handling of radioactive material and/or controlled apparatus within or outside of licensees' premises; and
(ix) Notification on the engagement of radiation activity such as Industrial Radiography or Well Logging (if applicable).

Transportation of radioactive materials shall comply with the United Nations Recommendations on the Transport of Dangerous Goods under Class number consignment "7" and the International Atomic Energy Agency (IAEA) Regulations for the Safe Transport of Radioactive Material (refer to Appendix G).

Notification must be submitted to SHENA by the Licensee or RPO who wishes to engage in Industrial Radiography or Well Logging activity at least 2 working days prior to commencement of the radiation activity using the prescribed notification form (refer to Appendix H).

PART 8: QUALITY ASSURANCE

The licensees shall provide information to ensure that their quality assurance is in place. This shall be supported by references from the manufacturer's recommendation and conducted by a certified service provider recognised by SHENA.

The licensees shall notify SHENA at least 7 working days prior to any installation of any radioactive materials and/or controlled apparatus within or outside of licensees' premises via email to radenforcement@shena.gov.bn.

The licensees shall provide information (including the technical requirements) on the leak/wipe test performed on the radioactive materials containment and/or maintenance programme of the controlled apparatus. This shall be conducted by licensees who are licenced for these activities.

PART 9: SECURITY PLAN

Licensees shall provide information on the secure handling of radioactive materials in their possession and consider every reasonable measure to prevent theft, loss, or sabotage.

The information provided shall take into consideration control measures such as detection, deterrents that lead to delay, and response to prevent unauthorised access to the radioactive material. These measures must be proven to be effective i.e. the use of alarm sensors, fences, strong storage containers, barriers for moving vehicles and/or trailers, security guards, etc.

A security plan shall be detailed and provided in a separate document, titled: Security Radioactive Material Programme (SRMP) for licensees according to the category of radioactive materials (IAEA, 2005) (refer to Appendix E) and shall depend on the categorisation of radiation activities (refer to Appendix I).

PART 10: EMERGENCY PREPAREDNESS AND RESPONSE

The licensees shall establish emergency preparedness and response procedures suited to the licensed radiation activities that take into account of the following:

(i) Type of potential incident and radiological accident;
(ii) Actions to be taken during each incident or radiological accident identified;
(iii) List of recovery actions;
(iv) List of equipment used; and
(v) List of emergency phone numbers including the RPO.

Any radiological incident or accident including stuck radioactive sources in well logging activities shall be reported to SHENA within twenty-four (24) hours via SHENA radiological emergency hotline at +673 737 0240 or via email to rademergency@shena.gov.bn.

The licensees shall carry out an internal investigation to determine the circumstances in which the incident or accident took place and its consequences. The investigation report shall be submitted to SHENA within thirty **(30) calendar days** of the accident and/or incident via email to rademergency@shena.gov.bn.

PART 11: DISPOSAL PLAN

The licensees shall not dispose of, transfer, or dismantle radioactive waste, items contaminated with radioactive material, stuck radioactive sources in well logging, radioactive material, and controlled apparatus, whether in a working condition or otherwise without prior written approval from SHENA. The application for disposal shall be submitted to SHENA via email to radenforcement@shena.gov.bn (refer to Appendix J).

The licensees shall prepare and provide a detailed Safety Analysis Report document on NORM and TENORM in a separate document (if applicable).

PART 12: RECORD KEEPING

The licensees shall provide information on the means of record-keeping with a file reference number.

Records shall include radiation worker information, import/export, dose records, medical records, training records, quality assurance records, radiation activity notifications, disposal plans, etc. Access to records is limited to authorised personnel only and may be requested by SHENA at any time.

PART 13: REFERENCE DOCUMENT

Licensees shall provide information on reference documents used in the development of the radiation protection programme.

7. EFFECTIVE DATE

These guidelines take effect immediately upon the date of release and when they are published on the SHENA website at **www.shena.gov.bn**. For further questions regarding this guideline, the licensees and applicants can contact SHENA at:

Safety Health and Environment National Authority (SHENA)
Level 4, Design and Technology Building,
Simpang 32-37, Kg Anggerek Desa,
Bandar Seri Begawan BB3713
Brunei Darussalam

Operating hours	:	Mon – Fri 8:00am – 11:30am; 2:00pm – 4:00pm
Office telephone no.	:	+673 2382000
Email address	:	**radapplication@shena.gov.bn**

8. REFERENCES

International Atomic Energy Agency (IAEA) (2005) "Categorization of Radioactive Sources" IAEA Safety Standards Series RS-G-1.9 ISBN 92–0–103905–0.

International Atomic Energy Agency (IAEA) (2018) IAEA "Regulations for the Safe Transport of Radioactive Material" IAEA Specific Safety Requirements No. SSR-6 (Rev. 1) ISBN 978–92–0–107917–6

United Nations (UN) (2019) "Recommendations on the Transport of Dangerous Goods – Model Regulations" ST/SG/AC.10/1/Rev.21

APPENDIX A

FOR EXTERNAL USE ONLY

EXAMPLE FOR
THE FRONT PAGE OF RADIATION PROTECTION PROGRAMME

COMPANY LOGO

RADIATION PROTECTION PROGRAMME

Version XXX

We hereby declare that all information contained in the Radiation Protection Programme are correct and true. We further acknowledge, understand, and agree that the programme will be implemented accordingly.

RADIATION PROTECTION OFFICER (RPO)	LICENSEE
Signature NAME: DATE:	Signature NAME: DATE:

APPENDIX B

DOSE LIMITS FOR OCCUPATIONAL RADIATION WORKERS AND PUBLIC

1. For occupational exposure of radiation workers over the age of 18 years old, the dose limits are: -

    a. an effective dose is 20mSv per year averaged over five consecutive years (total of 100 mSv in 5 years);
    b. an equivalent dose to the lenses of the eye is 20 mSv per year averaged over five consecutive years (total of 100 mSv in 5 years);
    c. an equivalent dose of the extremities (hand and feet) or to the skin is 500 mSv in a year; and
    d. restriction applies to occupational exposure for a female worker who has notified pregnancy or is breast feeding.

2. For occupational exposure of apprentices aged between 16 to 18 years old who are being trained for employment involving radiation or use of sources in their studies, the dose limits are:

    a. an effective dose is 6 mSv in a year;
    b. an equivalent dose to the lenses of the eye is 20mSv in a year; and
    c. an equivalent dose to extremities (hand and feet) or the skin is 150 mSv in a year.

3. Dose limit does not apply to medical exposure (patient) but with reasonable justification for exposure;

4. For public exposure, the dose limits are: -

    a. an effective dose is 1 mSv in a year;
    b. an equivalent dose to the lenses of the eye is 15 mSv in a year; and
    c. an equivalent dose to the skin is 50 mSv in a year.

5. For radiological emergency, default Operational Intervention Limits (OIL) for concentrations of markers ^{131}Iodine and ^{137}Caesium in food, milk, and drinking water which is not more than the following value:

    a. ^{137}Caesium : 200Bq/kg
    b. ^{131}Iodine :1000Bq/kg

APPENDIX C

FOR EXTERNAL USE ONLY

AN EXAMPLE OF OFFICIAL TERMINATION LETTER

COMPANY LOGO

Ref No:

DD MM YYYY

Compliance and International Division
Safety, Health, and Environment National Authority (SHENA)
Level 4, Design and Technology Building, Spg 32-37, Kg Anggerek Desa
Bandar Seri Begawan, BB 3713
Negara Brunei Darussalam

Dear Sir/Madam,

LETTER TO TERMINATE REGISTRATION OF RADIATION WORKER

We would like to officially inform the Compliance and International Division, SHENA of the termination of the following radiation workers' registration with their particulars:

NAME OF RADIATION WORKERS	REG. NO	POSITION
INSERT NAME OF WORKER	INSERT REGISTRATION NO. (e.g. R/0001)	INSERT POSITION (e.g. General Radiation Worker)

The latest dose records and medical fitness report is attached to this letter. We will return the radiation worker card within 30 working days from the date of the letter.

Thanking you in advance for your kind attention towards this matter.

.....

<INSERT NAME>
<INSERT POSITION AS LICENSEE OR RPO>
<INSERT COMPANY NAME>

APPENDIX D

FOR EXTERNAL USE ONLY

INDIVIDUAL OCCUPATIONAL EXPOSURE DOSE RECORD

RADIATION DOSIMETRY REPORT | **Page 1**

Business Entity Name :
Radiation Worker Name :
Registration Number :
Position :
Dosimeter ID :

Monitoring Period (Year)	Dose Equivalent (mSv)	
	Hp (10)	Hp (0.07)
	0.00	0.00
	0.00	0.00
	0.00	0.00
	0.00	0.00
	0.00	0.00
Total Dose for 5 Years	0.00	0.00

Report Recorded By

Name :
Position :
Date :
Signature & Stamp :

Note: Please attach this report together with the laboratory dosimetry report via email: radapplication@shena.gov.bn

Figure 1: Summary for 5 years individual occupational exposure dose records

INDIVIDUAL RADIATION DOSIMETRY REPORT

Page 2

Business Entity Name :
Radiation Worker Name :
Registration Number : Position :
Dosimeter ID : Year :

Monitoring Period (DD/MM/YY)		Dose Equivalent (mSv)		Year to Date Dose Equivalent (mSv)	
From	To	Hp (10)	Hp (0.07)	Hp (10)	Hp (0.07)
				0.00	0.00
				0.00	0.00
				0.00	0.00
				0.00	0.00
				0.00	0.00
				0.00	0.00
				0.00	0.00
				0.00	0.00
				0.00	0.00
				0.00	0.00
				0.00	0.00
				0.00	0.00

Report Recorded By

Name :
Position :
Date :
Signature & Stamp :

Note: Please attach this report together with the laboratory dosimetry report via email: radapplication@shena.gov.bn

Figure 2: Annual individual occupational exposure dose records

APPENDIX E

CATEGORISATION OF RADIOACTIVE MATERIAL

CATEGORY	SOURCES AND PRACTICES
1	▪ Radioisotope Thermoelectric Generators (RTGs)
	▪ Irradiator sources
	▪ Teletherapy source
	▪ Multi – Beam Teletherapy (Gamma Knife) sources
2	▪ Industrial Gamma Radiography sources (Non-Destructive Testing)
	▪ Gamma Projector (Depleted Uranium)
	▪ Brachytherapy sources
	▪ Calibration sources (^{60}Co)
3	▪ Industrial level gauges
	▪ Conveyor gauges
	▪ Well logging gauges
	▪ Radioactive materials used for security purposes
	▪ Calibration sources (^{241}Am)
	▪ Blast furnace gauges
	▪ Spinning pipe gauges (^{137}Cs)
4	▪ Thickness gauges
	▪ Fill level gauges
	▪ Calibration sources (^{90}Sr,^{137}Cs, ^{57}Co)
	▪ Moisture detectors (^{241}Am/Be)
	▪ Density gauges (^{137}Cs)
	▪ Static Eliminators sources
	▪ Bone Densitometers sources
	▪ X-ray Fluorescence (XRF) analyser sources (^{55}Fe)
	▪ Electron capture detector sources
	▪ Medical unsealed sources
	▪ Tritium targets (^{3}H)
	▪ PET check sources (^{68}GE)
	▪ Mossbauer spectrometry sources (^{57}Co)
	▪ Naturally Occurring Radioactive Material (NORM)
	▪ Technologically Enhanced Naturally Occurring Radioactive Material (TENORM)
	▪ Thorium Blanket (^{232}Th)

CATEGORISATION OF CONTROLLED APPARATUS

CATEGORY	APPARATUS PRACTICES	TUBE VOLTAGE
1	Industrial and Medical controlled apparatus	≥ 11MeV/MV
2	Industrial and Medical controlled apparatus	≥ 1 MeV/MV
3	Industrial and Medical controlled apparatus	≥ 1 keV/kV

APPENDIX F

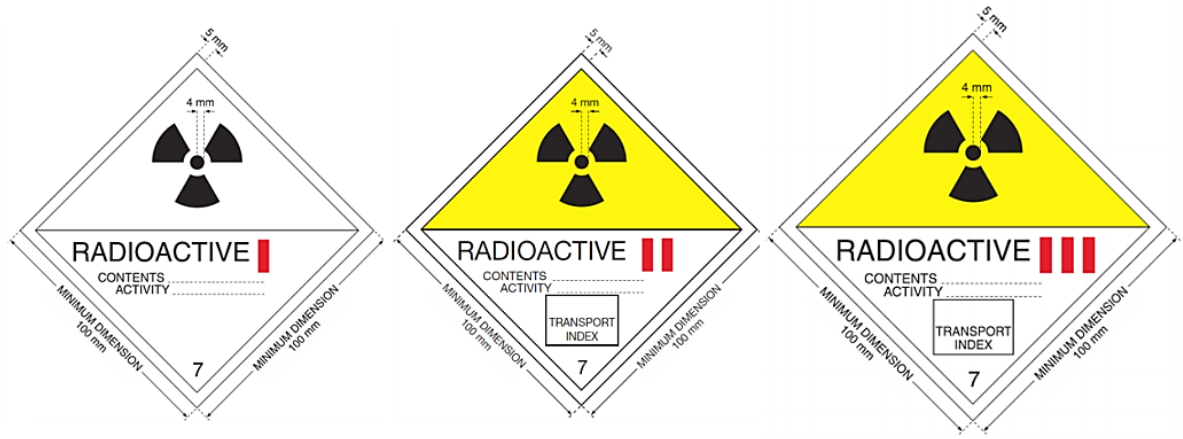
CATEGORISATION OF RADIATION ACTIVITIES FOR MONITORING PROGRAMME

NO.	RADIATION ACTIVITIES	REQUIREMENT		
		PERSONAL DOSIMETER	SURVEY METER	ENVIRONMENTAL MONITORING
1	Sales of any controlled apparatus	No	No	No
2	Sales and maintenance of any controlled apparatus	Yes	Yes	No
3	Sales and transport of any controlled apparatus	No	No	No
4	Sales of any radioactive materials	No	No	No
5	Sales and transport of any radioactive materials	Yes	Yes	No
6	Sales and maintenance of any radioactive materials	Yes	Yes	No
7	Use of any radioactive materials	Yes	Yes	Yes
8	Handling of NORM and TENORM	Yes	Yes	Yes
9	Use of check source/reference source for education purposes	No	No	No
10	Use of controlled apparatus (Category 1,2 and 3)	Yes	Yes	Yes
11	Use of controlled apparatus (Category 4)	Yes	No	Yes
11	Use of dental and mobile x-rays	Yes	No	No
12	Use of XRF, XRD, SEM and Metal Analyser	Yes	No	No
13	Transport of any radioactive materials (via land)	Yes	Yes	No
14	Transport of any radioactive materials (via sea)	Yes	Yes	Yes
15	Transport of any radioactive materials (via air)	No	No	No
16	Permanent or temporary storage of any radioactive materials	Yes	Yes	Yes
17	Permanent or temporary storage of any controlled apparatus	Yes	No	No

APPENDIX G

FOR INTERNAL AND EXTERNAL USE

LABELLING FOR RADIOACTIVE CONTENTS



CONDITIONS		CATEGORY COLOR
TRANSPORT INDEX (TI)	MAXIMUM RADIATION LEVEL AT ANY POINT ON THE EXTERNAL SURFACE	
0	Not more than 0.005 mSv/h	I – WHITE
$0 < TI < 1$	More than 0.005 mSv/h but less than 0.5 mSv/h	II – YELLOW
$1 \leq TI \leq 10$	More than 0.5 mSv/h but less than 2 mSv/h	III – YELLOW
$TI \geq 10$	More than 2 mSv/h but less than 10 mSv/h	III – YELLOW and under exclusive use

The transport index is calculated using the following formula:

$$TI = \frac{\text{Maximum radiation level in } \mu Sv/hr \text{ at 1 metre from the external surface of the package}}{10}$$

The Placard is to be displayed on overpack, tank freight containers, and any suitable commercial vehicle.

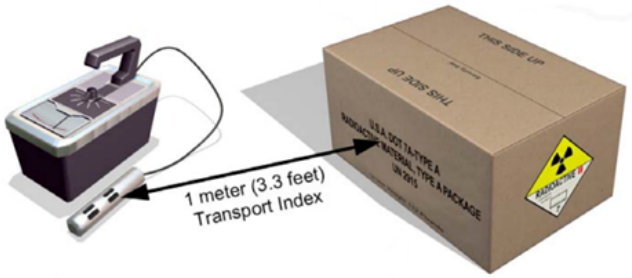


Figure 3 : Distance to measure Transport Index

APPENDIX H

FOR INTERNAL AND EXTERNAL USE

RADIATION ACTIVITY NOTIFICATION FORM

NOTE:

1. This notification form must be completed by the Licensee or Radiation Protection Officer (RPO) who wishes to engage in **Industrial Radiography or Well Logging activity.**
2. This notification form must be submitted to the Compliance and International Division, SHENA to **radenforcement@shena.gov.bn** at least 2 working days prior to commencement of the radiation activity.
3. The RPO is reminded to notify the Compliance and International Division, SHENA at +673 7370240 or email at **rademergency@shena.gov.bn** for the occurrence of any radiological incident/accident.

COMPANY NAME		**LICENCE NO.**	
ACTIVITY	☐ **INDUSTRIAL RADIOGRAPHY** ☐ **WELL LOGGING**	**LICENCE EXPIRY DATE**	
WORK DETAILS			
CLIENT COMPANY NAME			
WORK LOCATION			
WORK REFERENCE (IF ANY)			
DATE OF WORK COMMENCEMENT		**DATE OF WORK COMPLETION**	
TIME OF WORK		**NO. OF RADIATION WORKERS**	
RADIATION SOURCE DETAILS			
TYPE OF SOURCE	☐ **RADIOACTIVE SOURCE** ☐ **CONTROLLED APPARATUS**		
VEHICLE REGISTRATION NO. FOR SOURCES TRANSPORTATION			
LIST OF SOURCES	**MODEL OF SOURCES**	**SERIAL NO.**	**CURRENT ACTIVITY (Ci) or MAX VOLTAGE (KeV)**

I declare that all information provided in this form is true and I authorize the Safety, Health and Environment National Authority (SHENA) to carry out verification on the radiation activity as necessary.

…….. ……

NAME OF LICENSEE/RPO: COMPANY STAMP

DATE:

FOR OFFICIAL USE ONLY

Regulatory Reference:

APPENDIX I

CATEGORISATION OF RADIATION ACTIVITIES FOR SRMP

NO.	RADIATION ACTIVITIES	REQUIREMENT	
		RPP	SRMP
1	Sales of any controlled apparatus	Yes	No
2	Sales and maintenance of any controlled apparatus	Yes	No
3	Sales and transport of any controlled apparatus	Yes	No
4	Use of Controlled Apparatus	Yes	No
5	Sales of any radioactive materials	Yes	No
6	Sales and maintenance of any radioactive materials (Category 1 and 2)	Yes	Yes
7	Sales and transport of radioactive materials (Category 1 and 2)	Yes	Yes
8	Sales and transport of radioactive materials (Category 3,4 and 5)	Yes	No
9	Use of radioactive materials (Category 1 and 2)	Yes	Yes
10	Use of radioactive materials (Category 3,4 and 5)	Yes	No
11	Use of check source for educational purpose	Yes	No
12	Transport of radioactive materials (via land) (Category 1 and 2)	Yes	Yes
13	Transport of radioactive materials (via land) (Category 3, 4 and 5)	Yes	No
14	Transport of radioactive materials (via sea) (Category 1 and 2)	Yes	Yes
15	Transport of radioactive materials (via sea) (Category 3,4 and 5)	Yes	No
16	Transport of any radioactive materials (via air)	Yes	No
17	Permanent or temporary storage of radioactive materials (Category 1 and 2)	Yes	Yes
18	Permanent or temporary storage of radioactive materials (Category 3,4 and 5)	Yes	No
19	Permanent or temporary storage of any controlled apparatus	Yes	No

APPENDIX J

FOR INTERNAL AND EXTERNAL USE

DISPOSAL APPLICATION FORM

NOTE:

1. This application form must be completed by the Licensee or Radiation Protection Officer (RPO) who wishes to dispose of any radioactive materials and/or controlled apparatus.
2. This application form must be submitted to the Compliance and International Division, SHENA at **radenforcement@shena.gov.bn** prior to any disposal.
3. This application form is to be submitted along with a disposal plan including (not limited to) photos taken before and after dismantling, location of disposal, method of disposal and etc when (*) is listed.

DETAILS OF APPLICANT			
COMPANY NAME		**LICENCE NO.**	
DETAILS OF RADIOACTIVE MATERIAL (if applicable)			
LIST OF RADIOACTIVE MATERIALS	**TYPE**	**SERIAL NO.**	**CURRENT ACTIVITY (Ci)**
DETAILS OF CONTROLLED APPARATUS (if applicable)			
LIST OF CONTROLLED APPARATUS	**MODEL**	**SERIAL NO.**	**YEAR OF INSTALLATION**
DISPOSAL OF COMPONENTS	☐ **ENTIRE UNIT** ☐ **X-RAY TUBE ONLY** ☐ **CONTROL PANEL/GENERATOR ONLY**		
DETAILS OF DISPOSAL			
DISPOSAL METHODS	☐ **RETURN TO SUPPLIER** ☐ **DISPOSAL COMPANY** ☐ **BY APPLICANT***		
DATE OF DISPOSAL		**PLAN TO REPLACE ITEM TO BE DISPOSED**	☐ **YES** ☐ **NO**
DETAILS OF SUPPLIER / DISPOSAL COMPANY (if applicable)			
COMPANY NAME		**TELEPHONE NO.**	
LICENCE NO. (IF ANY)		**EMAIL ADDRESS**	
ADDRESS			

DECLARATION

I, declare that all particulars and information provided in this application hereto are true to the best of my knowledge and belief, and I understand that the Safety, Health and Environment National Authority (SHENA) reserves the right to reject this application if, at any stage, the information provided is false and incorrect. Shall verification is required on any information provided in this application; I hereby authorise SHENA to carry out the necessary investigations.

_____ Name and Signature of Applicant

_____ Date and Business Entity Stamp

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