

Radiation Protection and Nuclear Science Department
 National Environment Agency
 Environmental Building, 3rd Storey, Annex Block
 40 Scotts Road, Singapore 228231
 Email: Contact_NEA@nea.gov.sg
 Website: <http://www.nea.gov.sg>



RADIATION PROTECTION ACT 2007

APPLICATION FOR REGISTRATION AS A RADIATION WORKER

This form will take approximately 15 minutes to be completed.

Every section of the application form MUST be duly completed. "N.A." should be used when appropriate. Application form without the details of the irradiating apparatus, incomplete application form, or incorrect payment will result in the rejection of this application.

For payment by cheques, the accompanying cheque must be submitted together with the completed application form, failing which the form will not be processed.

1. Name in full:		Recent passport size photograph of the applicant
Previous Licence no if any:		
2. Marital Status:	3. Sex:	
4. Home Address:	5. Tel No.:	
Postal Code:		
6. Date of Birth:	7. Email Address:	
Age:		
8. NRIC/FIN Number:	9. Nationality:	
<i>(FIN number holders can only apply to work at companies for which their pass is valid.)</i>		
10. Occupation or designation in employing organisation: <i>(For radiographers, nuclear medicine technologists and radiation therapists, please attach relevant academic qualifications and AHPC registration / letter of in-principle approval, if applicable.)</i> Student		
11. Qualification: Studying in the BSc (Hons) Diagnostic Radiography and Imaging programme		
12. Name and address of employer:	13. Tel No.:	
Parkway College of Nursing and Allied Health, 168 Jalan Bukit Merah, Tower 3, #02-05, S150168	6508 6946	
	14. Fax No.:	
	6278 6075	
15. Type of radiation work to be engaged in: <i>(indicate radiation type exposed to)</i> Ionising radiation Non-Destructive Testing (NDT) work with Ir-192 / Se-75 / Co-60? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>		
16. Details of duties you are required to perform and frequency: Performing experiments at x-ray labs and radiographic examinations at clinical sites under supervision.		
17. Experience in the type of radiation work proposed to be engaged in: <i>(If no, please provide the information on the type of training to be provided.)</i> No. Training will be provided in the form of lectures, tutorials and workshops on Radiation Safety and Radiation Protection Act 2007. All lab and clinical sessions will be guided and supervised by qualified radiographers.		

18. Record of previous cumulative body dose (If not known, give name(s) of previous employer(s)).	
<u>Period (Date)</u>	<u>Dose/Employer</u>
a) NA	
b)	
c)	
19. Name and licence number of the individual licensed to do the radiation work and under whose supervision or direction you will work (L5/L6) :	
Name : <u>Lui Yin Wah</u> L5/L6 No.: <u>L5/03872/0066</u>	
20. Are you aware of the potential radiation hazards associated with the radiation work?	@ Yes / Ne
21. Have you been fully instructed by the individual licensed to do the radiation work in all the work procedures and rules, and the emergency procedures appropriate to your duty?	@ Yes / Ne
22. Do you understand and agree to comply with all radiation safety rules and regulations, including wearing of a personnel dosimeter and use of a survey meter?	@ Yes / Ne
@ Delete as appropriate	

STATEMENT

I hereby apply to be registered as a Radiation Worker and declare that all the particulars contained in the application are correct and true.	
<i>The National Environment Agency (NEA) collects personal information to carry out its various functions and duties under the National Environment Agency Act (Cap 195) including the implementation of environmental and public health policies in Singapore and any other related purposes. I hereby consent to NEA's use of the information provided by me in the course of any application I have made to the NEA, to facilitate the processing of such application for such purposes. I hereby further consent to NEA sharing the information in such application with other Government agencies, or non-government entities authorised to carry out specific government services, unless prohibited by legislation.</i>	
_____	_____
Signature of Applicant	Date

COUNTERSIGNATURES

I endorse the above application.		
_____	_____	
Signature of licensed individual (L5/L6) named in section (19)	Date	
I endorse the above application.		
_____	_____	_____
Name of employer	Signature of Employer	Date

Notes:

1. Applicants wishing to be registered as a Radiation Worker should first undergo a medical examination by Medical Practitioner with Medical Certificate Form MC1.
2. Applicant may be required to attend a licence qualifying test. Notice to attend the test will be sent to employer's address hence applicant is to ensure the address is correct.
3. Appropriate personnel monitoring services will be provided by the Radiation Protection and Nuclear Science Department (RPNSD) for all registered Radiation Workers.
4. Applicants not already holding a personal dosimeter issued by the Radiation Protection and Nuclear Science Department will receive the personal dosimeter by courier after the application is approved, according to the department-appointed schedule. Alternatively, applicants may arrange for self-collection of the personal dosimeter at NEA Customer Service Centre by contacting the followings RMSU Officers via email:
 - Mr Sheikh Md Akbari at Sheikh_Md_Akbari@nea.gov.sg
 - Mr How Chu Leng at How_Chu_Leng@nea.gov.sg
5. If the applicant does not have a plastic holder for the personnel dosimeter, please add **\$25.20** nett (GST already included) for the purchase of a holder.
6. The completed application form should be submitted together with the prescribed fee of **\$105/-** to:

Director
 Radiation Protection and Nuclear Science Department
 National Environment Agency
 Environment Building
 3rd Storey, Annex Block
 40 Scotts Road, Singapore 228231

Mode of payment* (Check with your Finance Department before completing this section – Please Tick One Only):

- Payment by GIRO (Your company must have a RPNSD Giro Account)
- Payment by cheque – Bank/cheque No: _____ (Please refer to Notes below.)
- Payment by NETS or Credit Cards at NEA Customer Service Counter

Note: Unless specially requested, the invoice and the receipt will be sent to the company address provided at Sections 1 & 3 above. **Cheques should be made payable to "National Environment Agency". Payment by methods not specified above is liable to be rejected and will cause processing delay to your application.*

* To facilitate licence / certificate application processing, you are strongly encouraged to make future payments through GIRO for quick, cashless transactions. You can download the GIRO application form online by following the link below. <http://www.nea.gov.sg/docs/default-source/services-and-forms/Radiation/giro-form1.pdf>

CONFIDENTIAL (a)

MEDICAL CERTIFICATE <i>([®] Delete as appropriate)</i>	Regulations 13(2)(a) and 18 of the Radiation Protection (Ionising Radiation) Regulations, 2000 <i>(Please read notes on the reverse of this form)</i>
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EXAMINATIONS	RESULTS AND/OR PERTINENT REMARKS
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HISTORY	
Family	
Medical	
Occupational	

CLINICAL (b) - please attach details	
	[®] Satisfactory / Unsatisfactory

SPECIAL INVESTIGATIONS (c)	
Dermatological	
Ophthalmological	
Pulmonary	
Gynaecological	
Neurological	
Other - please specify	

FULL BLOOD EXAMINATION (d)	
Name of Laboratory	[®] Satisfactory / Unsatisfactory (Date of Examination _____) If unsatisfactory, reason _____
Hb	_____ gm/100ml RBC _____ M/mm ³ WBC _____ /mm ³
Neu	_____ % Lymph _____ % Mono _____ %
Eos	_____ % Baso _____ % Platelets _____ or 10 ³ /mL

STATEMENT

This is to certify that _____ NRIC No. _____ employed by _____ has undergone a medical examination by me and I am of the opinion that [®] he / she is [®] fit / unfit to be engaged in radiation work (e).

Date _____ *Signature of Medical Practitioner* _____

Address of Hospital/Clinic _____ *Name of Medical Practitioner* _____

FOR OFFICAL USE

Remarks:
MCI
Notes:

- (a) This certificate should be given to the examining Medical Practitioner for completion and should be submitted together with the application form to:-

Radiation Protection and Nuclear Science Department
National Environment Agency
Environment Building
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- (b) A clinical examination need only include a chest or other X-ray examination if there are indications present to suggest that such an examination is desirable or the person has been or will be exposed to radioactive dusts, aerosols or gases. Unless there are special reasons for doing so, an X-ray examination made within the last six months should not be repeated but rather efforts should be made to obtain results of that previous examination.

- (c) Only those organs or functions which are regarded as particularly vulnerable to, or important for protection against, the radiation hazards encountered in the work to be undertaken need be specially investigated.

e.g.- A dermatological examination is important for a person handling unsealed sources (as any lesions might promote ingress of radioactive material through the skin); a person handling beta sources (as beta are largely absorbed in the skin and sub-cutaneous tissue and large doses due to close proximity to the source could cause localised erythema or radiation burns); and a person operating strong sources such as are encountered in industrial radiography or maintenance of X-ray machines (as even momentary contact with such sources is damaging and observed as erythema, skin burns or erosion of the ridges of the finger).

An ophthalmologic examination is important for a person working with strong beta sources (as beta are absorbed in the body's surface layers and the eyes are particularly sensitive with the possibility of opacities of the lens after receiving large accumulated doses); or a person exposed to non-ionising radiations such as microwaves, infra-red or laser (which can produce lens opacities) or ultra-violet (which at wavelengths below 320 nm can produce severe post exposure discomfort). Red/green blindness should be noted for workers operating X-ray control panels with coloured indicators lights.

A pulmonary examination is important for a person likely to be exposed to radioactive dusts, aerosols or gases (as in such cases the lungs could receive higher doses than other organs and are particularly susceptible to radiation induced neoplasms. Any reduction in the ability to clear the lungs of particulate will also increase residence times and consequent dose to lung tissue).

Females of reproductive age working with unsealed sources, gamma, X-ray or neutron sources, but not sealed beta or alpha source (as their radiation has insufficient ability to penetrate) should be investigated for onset of pregnancy which, although not a disqualifier for radiation work, does require stricter dose limits to be observed. Sterility and amenorrhea can be caused by large doses of radiation (several Sievert). Such symptoms should be investigated to rule out any link with radiation exposure.

A neurological examination is of particular importance for a person handling unsealed sources or performing other delicate operations where a spill or uncontrolled movement might result in a radiation hazard.

Other special investigations may be important in certain specific areas of work, such as an examination of the thyroid for a worker in danger of intake of substantial quantities of an iodine radionuclide or the stomach and lower large intestine for a worker in danger of ingesting insoluble radionuclides.

- (d) The definition of "full blood examination" in The Radiation Protection (Ionising Radiation) Regulations 2000, means:-

- (i) an estimation of the haemoglobin in grams per 100ml of whole blood;
- (ii) an estimation of the number of red blood cells present per mm³ of whole blood;
- (iii) an estimation of the number of white blood cells present per mm³ of whole blood;
- (iv) a differential white cell count;
- (v) a platelet count.

Any abnormal results should be investigated to ascertain the cause. However, the full blood examination serves mainly to establish a rough baseline in order that a comparison can be made following any accidental radiation overdose. Results historically outside of normal limits need not on their own render a person unfit to be engaged in radiation work.

- (e) Where the person examined is considered unfit to be engaged in radiation work, please give the reasons.