

Effective April 1, 2017

Canadian Nuclear Safety Commission
Cost Recovery Fees Schedule
Formula and Fixed Fees
2017-2018
Published by the Canadian Nuclear Safety Commission

Également publié en français sous le titre de :
Commission canadienne de sûreté nucléaire
Barème des droits pour le recouvrement des coûts
Droits fondés sur une formule de calcul et droits fixes
2017-2018

For more information on the Canadian Nuclear Safety Commission Fee Schedule, please contact :

Finance and Administration Directorate
Canadian Nuclear Safety Commission
280 Slater Street
P.O. Box 1046, Station B
Ottawa, ON K1P 5S9

Tel.: 1-888-229-2672
Facsimile: (613) 995-5086
E-mail: cncs.finance-finance.ccsn@canada.ca
Web site: www.nuclearsafety.gc.ca

CONTENTS

- 1. Introduction
- 2. Formula Fees
- 3. Fixed fees for certificates and transportation licences

1. INTRODUCTION

The fees schedule provided in this document relates to the *Canadian Nuclear Safety Commission Cost Recovery Fees Regulations* .

The fees structure reflects the characteristics of the different types of licences issued, the regulations to which they are subject, and the CNSC cost of regulating the licences. The primary focus of the CNSC's fee-setting process and structure is to directly link the fees to be charged to the costs of regulatory activities required for the issuance and maintenance of licences and certificates and to recover the full costs of these activities.

The schedule outlines the following:

- Formula Fees
- Fixed fees for certificates and transportation licences

2. FORMULA FEES

Formula fees apply to applicants and licensees in respect of:

- Class II Nuclear Facilities
- Class II Prescribed Equipment
- Dosimetry Services
- nuclear substances and radiation devices to which the *Nuclear Substances and Radiation Devices Regulations* apply, except with respect to and licences for waste nuclear substance activities

The structure for formula fee licences sets fees on a standard basis across all licences of that type. The generic structure of the fee formula uses a series of components that are multiplied to calculate the applicable fee.

$$\text{Fee} = [\text{base hours} + (\text{variable hours per unit} \times \text{number of units})] \times \text{hourly rate} \times \text{compliance coefficient}$$

Detailed fees schedules are indicated in the following pages.

CNSC 2017-2018 Cost Recovery Fees Schedule

Class II Nuclear Facilities Hourly rate = \$260
Compliance Coefficient = 1

1. LINAC AND/OR ELECTROSTATIC PARTICLE ACCELERATOR RESEARCH FACILITY

1. (a) Linacs and/or electrostatic particle accelerator research facility

Use Type =	518 Construction		519 Commissioning & Operating		520 Decommissioning	
	Initial Application Fee	Annual Licence Fee	Initial Application Fee	Annual Licence Fee	Initial Application Fee	Annual Licence Fee
Base hours =	60.00	10.50	100.00	49.00	45.00	
Fees Payable for 2017-2018						
Total Minimum =	\$15,600.00	\$2,730.00	\$26,000.00	\$12,740.00	\$11,700.00	
Total Maximum =	\$15,600.00	\$2,730.00	\$26,000.00	\$12,740.00	\$11,700.00	
Fee = base hours × hourly rate × compliance coefficient						

1. (b) Linacs and/or electrostatic particle accelerator research facility with service

Use Type =	619 Commissioning & Operating	
	Initial Application Fee	Annual Licence Fee
Base hours =	115.00	64.00
Fees Payable for 2017-2018		
Total Minimum =	\$29,900.00	\$16,640.00
Total Maximum =	\$29,900.00	\$16,640.00
Fee = base hours × hourly rate × compliance coefficient		

2. CYCLOTRON FACILITY

2. (a) Cyclotron facility

Use Type =	515 Construction		516 Commissioning & Operating		517 Decommissioning	
	Initial Application Fee	Annual Licence Fee	Initial Application Fee	Annual Licence Fee	Initial Application Fee	Annual Licence Fee
Base hours =	70.00	11.00	130.00	51.00	50.00	
Fees Payable for 2017-2018						
Total Minimum =	\$18,200.00	\$2,860.00	\$33,800.00	\$13,260.00	\$13,000.00	
Total Maximum =	\$18,200.00	\$2,860.00	\$33,800.00	\$13,260.00	\$13,000.00	
Fee = base hours × hourly rate × compliance coefficient						

2. (b) Cyclotron facility with service

Use Type =	616 Commissioning & Operating	
	Initial Application Fee	Annual Licence Fee
Base hours =	145.00	66.00
Fees Payable for 2017-2018		
Total Minimum =	\$37,700.00	\$17,160.00
Total Maximum =	\$37,700.00	\$17,160.00
Fee = base hours × hourly rate × compliance coefficient		

CNSC 2017-2018 Cost Recovery Fees Schedule

3. NEUTRON GENERATOR

3. (a) Neutron generator – geophysical logging accelerator

Use Type =

	504	
	Commissioning & Operating	
	Initial	Annual
	Application Fee	Licence Fee
Base hours =	6.00	2.80
Hours per Location =	4.00	4.25

Fees Payable for 2017-2018

Total Minimum =	\$2,600.00	\$1,833.00
Total Maximum =	unlimited	unlimited

Fee = [base hours + (variable hours per location × number of locations)] × hourly rate × compliance coefficient

3. (b) Neutron generator – industrial applications

Use Type =

	506		507		508	
	Construction		Commissioning & Operating		Decommissioning	
	Initial	Annual	Initial	Annual	Initial	Annual
	Application Fee	Licence Fee	Application Fee	Licence Fee	Application Fee	Licence Fee
Base hours =	40.00	10.00	30.00	19.50	18.00	
Hours per Location =	1.00		2.00	1.00		

Fees Payable for 2017-2018

Total Minimum =	10,660.00	2,600.00	8,320.00	5,330.00	4,680.00	
Total Maximum =	unlimited	2,600.00	unlimited	unlimited	4,680.00	

Construction annual fee = base hours × hourly rate × compliance coefficient

Decommissioning initial application fee = base hours × hourly rate × compliance coefficient

Remaining fees = [base hours + (variable hours per location × number of locations)] × hourly rate × compliance coefficient

4. PARTICLE ACCELERATOR MEDICAL FACILITY

4. (a) Particle accelerator medical facility

Use Type =

	521		522		523	
	Construction		Commissioning & Operating		Decommissioning	
	Initial	Annual	Initial	Annual	Initial	Annual
	Application Fee	Licence Fee	Application Fee	Licence Fee	Application Fee	Licence Fee
Base hours =	40.00	10.50	81.00	32.00	30.00	
Hours per Bunker =	3.00		6.00	6.00		

Fees Payable for 2017-2018

Total Minimum =	\$11,180.00	\$2,730.00	\$22,620.00	\$9,880.00	\$7,800.00	
Total Maximum =	unlimited	\$2,730.00	unlimited	unlimited	\$7,800.00	

Construction annual fee = base hours × hourly rate × compliance coefficient

Decommissioning initial application fee = base hours × hourly rate × compliance coefficient

Remaining fees = [base hours + (variable hours per bunker × number of bunkers)] × hourly rate × compliance coefficient

4. (b) Consolidated particle accelerator medical facility with service

Use Type =

	524	
	Commissioning & Operating	
	Initial	Annual
	Application Fee	Licence Fee
Base hours =	25.00	134.00
Hours per Bunker =	1.00	7.00

Fees Payable for 2017-2018

Total Minimum =	\$6,760.00	\$36,660.00
Total Maximum =	unlimited	unlimited

Fee = [base hours + (variable hours per bunker × number of bunkers)] × hourly rate × compliance coefficient

CNSC 2017-2018 Cost Recovery Fees Schedule

4. (c) Consolidated particle accelerator medical facility		
Use Type =	525	
	Commissioning & Operating	
	Initial	Annual
	Application Fee	Licence Fee
Base hours =	8.00	88.00
Hours per Bunker =	1.00	6.00
Fees Payable for 2017-2018		
Total Minimum =	\$2,340.00	\$24,440.00
Total Maximum =	unlimited	unlimited
Fee = [base hours + (variable hours per bunker × number of bunkers)] × hourly rate × compliance coefficient		
4. (d) Consolidated particle accelerator medical facility & manual brachytherapy		
Use Type =	527	
	Commissioning & Operating	
	Initial	Annual
	Application Fee	Licence Fee
Base hours =	20.00	101.00
Hours per bunker =	1.00	6.00
Fees Payable for 2017-2018		
Total Minimum =	\$5,460.00	\$27,820.00
Total Maximum =	unlimited	unlimited
Fee = [base hours + (variable hours per bunker × number of bunkers)] × hourly rate × compliance coefficient		
4. (e) Consolidated particle accelerator medical facility & manual brachytherapy with service		
Use Type =	526	
	Commissioning & Operating	
	Initial	Annual
	Application Fee	Licence Fee
Base hours =	37.00	147.00
Hours per bunker =	1.00	7.00
Fees Payable for 2017-2018		
Total Minimum =	\$9,880.00	\$40,040.00
Total Maximum =	unlimited	unlimited
Fee = [base hours + (variable hours per bunker × number of bunkers)] × hourly rate × compliance coefficient		

5. POOL-TYPE IRRADIATOR FACILITY						
5. (a) Pool-type irradiator facility						
Use Type =	537		538		539	
	Construction		Commissioning & Operating		Decommissioning	
	Initial	Annual	Initial	Annual	Initial	Annual
	Application Fee	Licence Fee	Application Fee	Licence Fee	Application Fee	Licence Fee
Base hours =	70.00	10.00	92.00	27.00	120.00	
Fees Payable for 2017-2018						
Total Minimum =	\$18,200.00	\$2,600.00	\$23,920.00	\$7,020.00	\$31,200.00	
Total Maximum =	\$18,200.00	\$2,600.00	\$23,920.00	\$7,020.00	\$31,200.00	
Fee = base hours × hourly rate × compliance coefficient						

CNSC 2017-2018 Cost Recovery Fees Schedule

5. (b) Pool-type irradiator facility with service		
Use Type =	638	
	Commissioning & Operating	
	Initial	Annual
	Application Fee	Licence Fee
Base hours =	107.00	42.00
Hours per type of Class II equipment =	1.00	1.00
Fees Payable for 2017-2018		
Total Minimum =	\$28,080.00	\$11,180.00
Total Maximum =	unlimited	unlimited
Fee = [base hours + (variable hours per type of Class II equipment × number of types of Class II equipment)] × hourly rate × compliance coefficient		

6. CALIBRATION IRRADIATOR FACILITY							
Use Type =	531		532		533		
	Construction		Commissioning & Operating		Decommissioning		
	Initial	Annual	Initial	Annual	Initial	Annual	
	Application Fee	Licence Fee	Application Fee	Licence Fee	Application Fee	Licence Fee	
Base hours =	30.00	10.00	67.00	48.00	23.00		
Fees Payable for 2017-2018							
Total Minimum =	\$7,800.00	\$2,600.00	\$17,420.00	\$12,480.00	\$5,980.00		
Total Maximum =	\$7,800.00	\$2,600.00	\$17,420.00	\$12,480.00	\$5,980.00		
Fee = base hours × hourly rate × compliance coefficient							

7. IRRADIATOR FACILITY - OTHER							
7. (a) Irradiator facility - other							
Use Type =	534		535		536		
	Construction		Commissioning & Operating		Decommissioning		
	Initial	Annual	Initial	Annual	Initial	Annual	
	Application Fee	Licence Fee	Application Fee	Licence Fee	Application Fee	Licence Fee	
Base hours =	30.00	11.00	63.00	48.00	24.00		
Fees Payable for 2017-2018							
Total Minimum =	\$7,800.00	\$2,860.00	\$16,380.00	\$12,480.00	\$6,240.00		
Total Maximum =	\$7,800.00	\$2,860.00	\$16,380.00	\$12,480.00	\$6,240.00		
Fee = base hours × hourly rate × compliance coefficient							
7. (b) Irradiator facility – other – with service							
Use Type =	635						
	Commissioning & Operating						
	Initial	Annual					
	Application Fee	Licence Fee					
Base hours =	78.00	63.00					
Hours per type of Class II equipment =	1.00	1.00					
Fees Payable for 2017-2018							
Total Minimum =	\$20,540.00	\$16,640.00					
Total Maximum =	unlimited	unlimited					
Fee = [base hours + (variable hours per type of Class II equipment × number of types of Class II equipment)] × hourly rate × compliance coefficient							

CNSC 2017-2018 Cost Recovery Fees Schedule

8. RADIOACTIVE SOURCE TELETHERAPY MACHINE

8. (a) Radioactive source teletherapy machine

Use Type =	541; 560		542; 561		543; 562	
	Construction		Commissioning & Operating		Decommissioning	
	Initial Application Fee	Annual Licence Fee	Initial Application Fee	Annual Licence Fee	Initial Application Fee	Annual Licence Fee
Base hours =	39.00	10.00	81.00	33.00	30.00	
Hours per Bunker =	3.00		6.00	6.00		

Fees Payable for 2017-2018

Total Minimum =	\$10,920.00	\$2,600.00	\$22,620.00	\$10,140.00	\$7,800.00
Total Maximum =	unlimited	\$2,600.00	unlimited	unlimited	\$7,800.00

Construction annual fee = base hours × hourly rate × compliance coefficient

Decommissioning initial application fee = base hours × hourly rate × compliance coefficient

Remaining fees = [base hours + (hours per bunker × number of bunkers)] × hourly rate × compliance coefficient

8. (b) Radioactive source teletherapy machine – veterinary

Use Type =	544		545	
	Construction		Commissioning & Operating	
	Initial Application Fee	Annual Licence Fee	Initial Application Fee	Annual Licence Fee
Base hours =	40.00	10.00	81.00	32.00
Hours per Bunker =	3.00		6.00	6.00

Fees Payable for 2017-2018

Total Minimum =	\$11,180.00	\$2,600.00	\$22,620.00	\$9,880.00
Total Maximum =	unlimited	\$2,600.00	unlimited	unlimited

Construction annual fee = base hours × hourly rate × compliance coefficient

Remaining fees = [base hours + (variable hours per bunker × number of bunkers)] × hourly rate × compliance coefficient

8. (c) Radioactive source teletherapy machine – veterinary with service

Use Type =	645	
	Commissioning & Operating	
	Initial Application Fee	Annual Licence Fee
Base hours =	96.00	47.00
Hours per bunker =	6.00	6.00
Hours per type of Class II equipment =	1.00	1.00

Fees Payable for 2017-2018

Total Minimum =	\$26,780.00	\$14,040.00
Total Maximum =	unlimited	unlimited

Fee = [base hours + (variable hours per bunker × number of bunkers) + (variable hours per type of Class II equipment × number of types of Class II equipment)] × hourly rate × compliance coefficient

9. BRACHYTHERAPY FACILITY - HDR/LDR REMOTE AFTER LOADER

Use Type =	551; 554		552; 555	
	Construction		Commissioning & Operating	
	Initial Application Fee	Annual Licence Fee	Initial Application Fee	Annual Licence Fee
Base hours =	23.00	10.50	51.00	32.00
Hours per Bunker =	3.00		6.00	6.00

Fees Payable for 2017-2018

Total Minimum =	\$6,760.00	\$2,730.00	\$14,820.00	\$9,880.00
Total Maximum =	unlimited	\$2,730.00	unlimited	unlimited

Construction annual fee = base hours × hourly rate × compliance coefficient

Remaining fees = [base hours + (variable hours per bunker × number of bunkers)] × hourly rate × compliance coefficient

CNSC 2017-2018 Cost Recovery Fees Schedule

10. BRACHYTHERAPY FACILITY - ALL OTHER REMOTE AFTERLOADERS		
Use Type =	558	
	Commissioning & Operating	
	Initial	Annual
	Application Fee	Licence Fee
Base hours =	12.00	11.00
Fees Payable for 2017-2018		
Total Minimum =	\$3,120.00	\$2,860.00
Total Maximum =	\$3,120.00	\$2,860.00
Fee = base hours × hourly rate × compliance coefficient		
Remaining fees = [base hours + (variable hours per bunker × number of bunkers)] × hourly rate × compliance coefficient		

11. CLASS II PRESCRIBED EQUIPMENT		
11. (a) Service - Class II prescribed equipment		
Use Type =	565; 566	
	Operating	
	Initial	Annual
	Application Fee	Licence Fee
Base hours =	30.00	48.00
Hours per Class II equipment type =	1.00	1.00
Fees Payable for 2017-2018		
Total Minimum =	\$8,060.00	\$12,740.00
Total Maximum =	unlimited	unlimited
Fee = [base hours + (variable hours per type of Class II equipment × number of types of Class II equipment)] × hourly rate × compliance coefficient		
11. (b) Development and testing - Class II prescribed equipment		
Use Type =	567	
	Operating	
	Initial	Annual
	Application Fee	Licence Fee
Base hours =	81.00	41.00
Hours per Class II equipment type =	6.00	1.00
Fees Payable for 2017-2018		
Total Minimum =	\$22,620.00	\$10,920.00
Total Maximum =	unlimited	unlimited
Fee = [base hours + (variable hours per type of Class II equipment × number of types of Class II equipment)] × hourly rate × compliance coefficient		

CNSC 2017-2018 Cost Recovery Fees Schedule

Dosimetry Services	Hourly Rate = \$260
	Compliance Coefficient = 1

12. COMMERCIAL DOSIMETRY SERVICES - EXTERNAL RADIATION					
(Use Type 591)					
		Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018		Hours	Fees Payable for 2017-2018
Base hours =	45.00	\$11,700.00		58.10	\$15,106.00
Total Minimum =	45.00	\$11,700.00		58.10	\$15,106.00
Total Maximum =	45.00	\$11,700.00		58.10	\$15,106.00
Fee = base hours × hourly rate × compliance coefficient					

13. COMMERCIAL DOSIMETRY SERVICES - INTERNAL RADIATION					
(Use Type 592)					
		Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018		Hours	Fees Payable for 2017-2018
Base hours =	45.00	\$11,700.00		58.10	\$15,106.00
Total Minimum =	45.00	\$11,700.00		58.10	\$15,106.00
Total Maximum =	45.00	\$11,700.00		58.10	\$15,106.00
Fee = base hours × hourly rate × compliance coefficient					

14. COMMERCIAL DOSIMETRY SERVICES - RADON PROGENY					
(Use Type 593)					
		Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018		Hours	Fees Payable for 2017-2018
Base hours =	45.00	\$11,700.00		58.10	\$15,106.00
Total Minimum =	45.00	\$11,700.00		58.10	\$15,106.00
Total Maximum =	45.00	\$11,700.00		58.10	\$15,106.00
Fee = base hours × hourly rate × compliance coefficient					

15. COMMERCIAL DOSIMETRY SERVICES - CONSOLIDATED					
(Use Type 594)					
		Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018		Hours	Fees Payable for 2017-2018
Base hours =	52.50	\$13,650.00		158.00	\$41,080.00
Total Minimum =	52.50	\$13,650.00		158.00	\$41,080.00
Total Maximum =	52.50	\$13,650.00		158.00	\$41,080.00
Fee = base hours × hourly rate × compliance coefficient					

16. IN-HOUSE DOSIMETRY SERVICES - EXTERNAL RADIATION					
(Use Type 595)					
		Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018		Hours	Fees Payable for 2017-2018
Base hours =	45.00	\$11,700.00		58.10	\$15,106.00
Total Minimum =	45.00	\$11,700.00		58.10	\$15,106.00
Total Maximum =	45.00	\$11,700.00		58.10	\$15,106.00
Fee = base hours × hourly rate × compliance coefficient					

CNSC 2017-2018 Cost Recovery Fees Schedule

17. IN-HOUSE DOSIMETRY SERVICES - INTERNAL RADIATION				
(Use Type 596)				
	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	45.00	\$11,700.00	23.80	\$6,188.00
Total Minimum =	45.00	\$11,700.00	23.80	\$6,188.00
Total Maximum =	45.00	\$11,700.00	23.80	\$6,188.00

Fee = base hours × hourly rate × compliance coefficient

18. IN-HOUSE DOSIMETRY SERVICES - RADON PROGENY				
(Use Type 597)				
	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	45.00	\$11,700.00	58.10	\$15,106.00
Total Minimum =	45.00	\$11,700.00	58.10	\$15,106.00
Total Maximum =	45.00	\$11,700.00	58.10	\$15,106.00

Fee = base hours × hourly rate × compliance coefficient

19. IN-HOUSE DOSIMETRY SERVICES - CONSOLIDATED				
(Use Type 598)				
	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	52.50	\$13,650.00	158.00	\$41,080.00
Total Minimum =	52.50	\$13,650.00	158.00	\$41,080.00
Total Maximum =	52.50	\$13,650.00	158.00	\$41,080.00

Fee = base hours × hourly rate × compliance coefficient

CNSC 2017-2018 Cost Recovery Fees Schedule

Nuclear Substances & Radiation Devices	Hourly Rate = \$260
	Compliance Coefficient = 1

20. CONSOLIDATED USES OF NUCLEAR SUBSTANCES				
(Use Type 815)				
	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	24.75	\$6,435.00	19.00	\$4,940.00
Hours per each of first 9 laboratories =	2.00	\$520.00	0.50	\$130.00
Hours per each of 10th to 39th laboratories =	0.70	\$182.00	1.25	\$325.00
Hours per each of 40th to 79th laboratories =	0.20	\$52.00	2.50	\$650.00
Hours per each of 80th+ laboratories =	0.20	\$52.00	3.25	\$845.00
Total Minimum =	26.75	\$6,955.00	19.50	\$5,070.00
Total Maximum =	unlimited	unlimited	unlimited	unlimited
Fee = [base hours + (variable hours per laboratory × number of laboratories)] × hourly rate × compliance coefficient				

21. GAUGES				
21. (a) Fixed gauges				
(Use Type 814)				
	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	10.00	\$2,600.00	5.90	\$1,534.00
Hours per location =	3.30	\$858.00	0.65	\$169.00
Hours per each of the first 39 devices =			0.55	\$143.00
Hours per each of the 40th+ devices =			0.85	\$221.00
Total Minimum =	13.30	\$3,458.00	7.10	\$1,846.00
Total Maximum =	30.00	\$7,800.00	90.95	\$23,647.00
Initial application fee = [base hours + (variable hours per location × number of locations)] × hourly rate × compliance coefficient				
Annual licence fee = [base hours + (variable hours per location × number of locations) + (variable hours per device × number of devices)] × hourly rate × compliance coefficient				
21. (b) Portable gauges				
(Use Type 811)				
	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	7.00	1,820.00	4.40	\$1,144.00
Hours per location =			1.10	\$286.00
Hours per each of the first 36 devices =			1.60	\$416.00
Hours per each of the 37th+ devices =			0.55	\$143.00
Total Minimum =	7.00	1,820.00	7.10	\$1,846.00
Total Maximum =	7.00	1,820.00	83.60	\$21,736.00
Initial application fee = base hours × hourly rate × compliance coefficient				
Annual licence fee = [base hours + (variable hours per location × number of locations) + (variable hours per device × number of devices)] × hourly rate × compliance coefficient				

CNSC 2017-2018 Cost Recovery Fees Schedule

22. INDUSTRIAL RADIOGRAPHY

(Use Type 812)

	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	14.30	\$3,718.00	33.55	\$8,723.00
Hours per device manufacturer =	5.00	\$1,300.00		
Hours per location =			1.25	\$325.00
Hours per each of the first 16 devices =			0.65	\$169.00
Hours per each of the 17th+ devices =			2.15	\$559.00
Hours per bunker =	5.00	\$1,300.00		
Total Minimum =	19.30	\$5,018.00	35.45	\$9,217.00
Total Maximum =	unlimited	unlimited	225.50	\$58,630.00

Initial application fee = [base hours + (variable hours per device manufacturer × number of device manufacturers) + (variable hours per bunker × number of bunkers)] × hourly rate × compliance coefficient

Annual licence fee = [base hours + (variable hours per location × number of locations) + (variable hours per device × number of devices)] × hourly rate × compliance coefficient

23. NUCLEAR MEDICINE AND HUMAN RESEARCH

23. (a) Diagnostic nuclear medicine

(Use type 862)

	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	11.40	\$2,964.00	10.40	\$2,704.00
Hours per locations =	3.00	\$780.00	9.85	\$2,561.00
Total Minimum =	14.40	\$3,744.00	20.25	\$5,265.00
Total Maximum =	unlimited	unlimited	unlimited	unlimited

Fee = [base hours + (variable hours per location × number of locations)] × hourly rate × compliance coefficient

23. (b) Therapeutic nuclear medicine

(Use type 872)

	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	9.80	\$2,548.00	6.75	\$1,755.00
Hours per location =	2.00	\$520.00	6.50	\$1,690.00
Total Minimum =	11.80	\$3,068.00	13.25	\$3,445.00
Total Maximum =	unlimited	unlimited	unlimited	unlimited

Fee = [base hours + (variable hours per location × number of locations)] × hourly rate × compliance coefficient

23. (c) Human research

(Use type 875)

	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	10.70	\$2,782.00	7.50	\$1,950.00
Hours per location =			7.50	\$1,950.00
Total Minimum =	10.70	\$2,782.00	15.00	\$3,900.00
Total Maximum =	10.70	\$2,782.00	unlimited	unlimited

Initial application fee = base hours × hourly rate × compliance coefficient

Annual licence fee = [base hours + (variable hours per location × number of locations)] × hourly rate × compliance coefficient

CNSC 2017-2018 Cost Recovery Fees Schedule

24. PETROLEUM EXPLORATION AND PRODUCTION

24. (a) Logging - sealed source

(Use type 816)

	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	17.30	\$4,498.00	5.70	\$1,482.00
Hours per location =	4.00	\$1,040.00	9.95	\$2,587.00
Total Minimum =	21.30	\$5,538.00	15.65	\$4,069.00
Total Maximum =	unlimited	unlimited	unlimited	unlimited

Fee = [base hours + (variable hours per location × number of locations)] × hourly rate × compliance coefficient

24. (b) Other petroleum exploration and production

Subsurface zone location, subsurface traces studies, tracer studies

(Use Types 844 / 846 / 858)

	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	16.60	\$4,316.00	10.70	\$2,782.00
Hours per location =	4.00	\$1,040.00	10.20	\$2,652.00
Total Minimum =	20.60	\$5,356.00	20.90	\$5,434.00
Total Maximum =	unlimited	unlimited	unlimited	unlimited

Fee = [base hours + (variable hours per location × number of locations)] × hourly rate × compliance coefficient

24. (c) Borehole tube tagging

(Use type 868)

	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	5.30	\$1,378.00	2.15	\$559.00
Hours per location =			2.70	\$702.00
Total Minimum =	5.30	\$1,378.00	4.85	\$1,261.00
Total Maximum =	5.30	\$1,378.00	unlimited	unlimited

Initial application fee = base hours × hourly rate × compliance coefficient

Annual licence fee = [base hours + (variable hours per location × number of locations)] × hourly rate × compliance coefficient

25. SERVICING, INSTALLATION & DISMANTLING OF DEVICES

25. (a) Basic servicing – portable gauges or fixed gauges (not both)

(Use Type 822)

	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	14.60	\$3,796.00	20.65	\$5,369.00
Hours per device manufacturer =			0.40	\$104.00
Total Minimum =	14.60	\$3,796.00	21.05	\$5,473.00
Total Maximum =	14.60	\$3,796.00	45.00	\$11,700.00

Initial application fee = base hours × hourly rate × compliance coefficient

Annual licence fee = [base hours + (variable hours per device manufacturer × number of device manufacturers)] × hourly rate × compliance coefficient

25. (b) Complex servicing – industrial radiography devices or any combination of portable gauges, fixed gauges and industrial radiography devices

(Use Type 823)

	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	16.10	\$4,186.00	25.75	\$6,695.00
Hours per device manufacturer =			1.00	\$260.00
Total Minimum =	16.10	\$4,186.00	26.75	\$6,955.00
Total Maximum =	16.10	\$4,186.00	46.25	\$12,025.00

Initial application fee = base hours × hourly rate × compliance coefficient

Annual licence fee = [base hours + (variable hours per device manufacturer × number of device manufacturers)] × hourly rate × compliance coefficient

CNSC 2017-2018 Cost Recovery Fees Schedule

26. UNSEALED NUCLEAR SUBSTANCES

26. (a) Laboratory studies

(Use Type 813)

	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	11.60	\$3,016.00	4.50	\$1,170.00
Hours per location =	4.00	\$1,040.00	1.00	\$260.00
Hours per each of the first 2 labs =			1.50	\$390.00
Hours per each of the 3rd+ labs =			3.00	\$780.00
Total Minimum =	15.60	\$4,056.00	7.00	\$1,820.00
Total Maximum =	unlimited	unlimited	unlimited	unlimited

Initial application fee = [base hours + (variable hours per location × number of locations)] × hourly rate × compliance coefficient

Annual licence fee = [base hours + (variable hours per location × number of locations) + (variable hours per laboratory × number of laboratories)] × hourly rate × compliance coefficient

26. (b) Processing a quantity not exceeding 10 GBq

(Use type 863)

	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	9.00	\$2,340.00	39.50	\$10,270.00
Total Minimum =	9.00	\$2,340.00	39.50	\$10,270.00
Total Maximum =	9.00	\$2,340.00	39.50	\$10,270.00

Fee = base hours × hourly rate × compliance coefficient

26. (c) Processing a quantity exceeding 10 GBq

(Use type 847)

	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	21.20	\$5,512.00	64.00	\$16,640.00
Total Minimum =	21.20	\$5,512.00	64.00	\$16,640.00
Total Maximum =	21.20	\$5,512.00	64.00	\$16,640.00

Fee = base hours × hourly rate × compliance coefficient

26. (d) Repair of components containing radioactive luminous compounds

(Use type 885)

	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	5.00	\$1,300.00	5.00	\$1,300.00
Total Minimum =	5.00	\$1,300.00	5.00	\$1,300.00
Total Maximum =	5.00	\$1,300.00	5.00	\$1,300.00

Fee = base hours × hourly rate × compliance coefficient

26. (e) Veterinary nuclear medicine

(Use type 915)

	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	9.00	\$2,340.00	7.00	\$1,820.00
Hours per location =	2.00	\$520.00	6.40	\$1,664.00
Total Minimum =	11.00	\$2,860.00	13.40	\$3,484.00
Total Maximum =	unlimited	unlimited	unlimited	unlimited

Fee = [base hours + (variable hours per location × number of locations)] × hourly rate × compliance coefficient

CNSC 2017-2018 Cost Recovery Fees Schedule

26. (f) Manufacturing of nuclear substances				
(Use type 851)				
	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	30.00	\$7,800.00	20.50	\$5,330.00
Total Minimum =	30.00	\$7,800.00	20.50	\$5,330.00
Total Maximum =	30.00	\$7,800.00	20.50	\$5,330.00

Fee = base hours × hourly rate × compliance coefficient

27. SEALED SOURCES AND RADIATION DEVICES				
27. (a) Sealed sources & radiation devices – low risk				
Beta backscatter gauging, Dew point detection, Display or use of components containing radioactive luminous compounds, Electron capture detection, Electronic component testing, Fuel gauges on board aircraft, Lightning warning, Liquid scintillation counter, Low energy imaging, Radioluminescence, Remote blade inspection, Radioactive check sources, Static detection, Static elimination, Smoke detection, Surge-voltage protection, Teaching - maximum sealed source size of 50MBq, X-ray fluorescence analysis				
(Use types 880 / 881 / 884 / 886 / 888 / 895 / 896 / 897 / 898 / 899 / 900 / 901 / 902 / 903 / 904 / 907 / 919 / 940)				
	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	1.50	\$390.00	2.35	\$611.00
Total Minimum =	1.50	\$390.00	2.35	\$611.00
Total Maximum =	1.50	\$390.00	2.35	\$611.00

Fee = base hours × hourly rate × compliance coefficient

27. (b) Sealed sources & radiation devices – medium risk				
Demonstration, Teaching - More than 50 MBq, Bone Mineral Analysis				
Research - maximum sealed source size of 50 MBq				
(Use types 883 / 889 / 894 / 908)				
	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	4.00	\$1,040.00	2.55	\$663.00
Total Minimum =	4.00	\$1,040.00	2.55	\$663.00
Total Maximum =	4.00	\$1,040.00	2.55	\$663.00

Fee = base hours × hourly rate × compliance coefficient

28. DISTRIBUTION OF NUCLEAR SUBSTANCES				
28. (a) Distribution – drop shipment				
(Use Type 824)				
	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	1.00	\$260.00	4.80	\$1,248.00
Total Minimum =	1.00	\$260.00	4.80	\$1,248.00
Total Maximum =	1.00	\$260.00	4.80	\$1,248.00

Fee = base hours × hourly rate × compliance coefficient

CNSC 2017-2018 Cost Recovery Fees Schedule

28. (b) Distribution – less than 740 MBq

(Use Type 825)

	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	10.30	\$2,678.00	3.20	\$832.00
Hours per location =			2.70	\$702.00
Total Minimum =	10.30	\$2,678.00	5.90	\$1,534.00
Total Maximum =	10.30	\$2,678.00	unlimited	unlimited

Initial application fee = base hours × hourly rate × compliance coefficient

Annual licence fee = [base hours + (variable hours per location × number of locations)] × hourly rate × compliance coefficient

28. (c) Distribution – equal to or greater than 740 MBq

(Use Type 826)

	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	9.50	\$2,470.00	12.30	\$3,198.00
Hours per location =			9.10	\$2,366.00
Total Minimum =	9.50	\$2,470.00	21.40	\$5,564.00
Total Maximum =	9.50	\$2,470.00	unlimited	unlimited

Initial application fee = base hours × hourly rate × compliance coefficient

Fee = [base hours + (variable hours per location × number of locations)] × hourly rate × compliance coefficient

29. SEALED SOURCES – GROUP II

29. (a) Device manufacturing

(Use type 864)

	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	16.80	\$4,368.00	24.50	\$6,370.00
Total Minimum =	16.80	\$4,368.00	24.50	\$6,370.00
Total Maximum =	16.80	\$4,368.00	24.50	\$6,370.00

Fee = base hours × hourly rate × compliance coefficient

29. (b) Calibration

(Use type 879)

	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	13.75	\$3,575.00	9.60	\$2,496.00
Total Minimum =	13.75	\$3,575.00	9.60	\$2,496.00
Total Maximum =	13.75	\$3,575.00	9.60	\$2,496.00

Fee = base hours × hourly rate × compliance coefficient

29. (c) Medium risk

Neutron activation, irradiation - self shielded type

Research - maximum sealed source size of more than 50 MBq

(Use types 867 / 873 / 878)

	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	6.40	\$1,664.00	7.50	\$1,950.00
Total Minimum =	6.40	\$1,664.00	7.50	\$1,950.00
Total Maximum =	6.40	\$1,664.00	7.50	\$1,950.00

Fee = base hours × hourly rate × compliance coefficient

CNSC 2017-2018 Cost Recovery Fees Schedule

30. MANUAL BRACHYTHERAPY				
(Use type 912)				
	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	24.50	\$6,370.00	25.50	\$6,630.00
Hours per treatment room =			1.00	\$260.00
Total Minimum =	24.50	\$6,370.00	26.50	\$6,890.00
Total Maximum =	24.50	\$6,370.00	unlimited	unlimited
Initial application fee = base hours × hourly rate × compliance coefficient				
Annual licence fee = [base hours + (variable hours per treatment room × number of treatment rooms)] × hourly rate × compliance coefficient				

31. DEVELOPMENT & TESTING				
(Use type 817)				
	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	17.10	\$4,446.00	6.40	\$1,664.00
Total Minimum =	17.10	\$4,446.00	6.40	\$1,664.00
Total Maximum =	17.10	\$4,446.00	6.40	\$1,664.00
Fee = base hours × hourly rate × compliance coefficient				

32. POSSESSION OF DEUTERIUM				
(Use type 916)				
	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	5.10	\$1,326.00	2.65	\$689.00
Total Minimum =	5.10	\$1,326.00	2.65	\$689.00
Total Maximum =	5.10	\$1,326.00	2.65	\$689.00
Fee = base hours × hourly rate × compliance coefficient				

33. STORAGE				
Storage - long term (more than 1 year)				
Temporary Possession - no use				
(Use type 906 / 918)				
	Initial Application Fee		Annual Licence Fee	
	Hours	Fees Payable for 2017-2018	Hours	Fees Payable for 2017-2018
Base hours =	11.60	\$3,016.00	4.10	\$1,066.00
Hours per device			1.20	\$312.00
Total Minimum =	11.60	\$3,016.00	5.30	\$1,378.00
Total Maximum =	11.60	\$3,016.00	unlimited	unlimited
Initial application fee = base hours × hourly rate × compliance coefficient				
Annual licence fee = [base hours + (variable hours per device × number of devices)] × hourly rate × compliance coefficient				

CNSC 2017-2018 Cost Recovery Fees Schedule

3. FIXED FEES FOR CERTIFICATES AND TRANSPORTATION LICENCES

Fees for certificates and transportation licences other than special arrangement or special form are published in Schedule 2 of the *CNSC Cost Recovery Fees Regulations*.

Detailed fee schedules are provided in the following pages.

CNSC 2017-2018 Cost Recovery Fees Schedule

Transportation Licences	Hourly Rate = \$260
--------------------------------	----------------------------

GENERAL All transportation licences other than special arrangement and special form Fees Payable for 2017-2018 = \$500
--

SPECIAL ARRANGEMENT Hours of direct regulatory activities = Actual hours worked Hourly Rate = \$260 Fee = number of hours of direct regulatory activities × hourly rate + cost of professional and special services obtained by CNSC under contract
--

CNSC 2017-2018 Cost Recovery Fees Schedule

Certificates

EXPOSURE DEVICE OPERATOR CERTIFICATION	
Fees Payable for 2017-2018 =	\$1,000

RADIATION DEVICE MODEL CERTIFICATE - TYPE 1	
Device Type 1 - devices containing more than 1 and less than 10 EQs	
Fees Payable for 2017-2018 =	\$1,500

RADIATION DEVICE MODEL CERTIFICATE - TYPE 2	
Device Type 2 - following devices and 10 EQs or more	
Includes: Bone mineral analysis, Dew point detection, Electronic component testing, Fuel gauges on board aircraft, Low energy imaging, Liquid scintillation counter, Radioluminescence, Static detection, Static elimination, Smoke detection, Surge voltage protection, X-ray fluorescence analysis.	
Fees Payable for 2017-2018 =	\$3,000

RADIATION DEVICE MODEL CERTIFICATE - TYPE 3	
Device Type 3 - following devices and 10 EQs or more	
Beta backscatter gauging, Calibration, Fixed gauges, Portable gauges	
Fees Payable for 2017-2018 =	\$6,000

RADIATION DEVICE MODEL CERTIFICATE - TYPE 4	
Device type 4 Includes Class II Prescribed Equipment	
Radiation devices - Industrial radiography, Irradiation: self shielded type, Neutron activation	
Class II Accelerators - Research, Geophysical logging & Medical calibration irradiator	
Class II Irradiators - Pool-type, Self shielded type, Calibration	
Class II Brachytherapy machine - High dose rate, Low dose rate & Intravascular therapy	
Class II Radioactive source teletherapy machine	
Fees Payable for 2017-2018 =	\$9,000

TRANSPORTATION PACKAGE CERTIFICATE - Special Arrangement/Special Form	
Hours of direct regulatory activities =	Actual hours worked
Hourly Rate =	\$260
Fee = number of hours of direct regulatory activities × hourly rate + cost of professional and special services obtained by CNSC under contract	

CNSC 2017-2018 Cost Recovery Fees Schedule

FIXED FEES		
Item	Column 1 Type of Application	Column 2 Fees Payable for 2017-2018
1	An application for a licence to transport nuclear material, other than a licence to transport under special arrangement	\$500
2	Except in respect of a certification for the package design of a special form radioactive material, an application for certification of a package	
	(a) having an "A" value (see note) not exceeding 1 with fissile material	
	(i) assessment of a Initial package design	\$8,000
	(ii) assessment of a package design similar to a certified package design	\$2,650
	(iii) assessment of a package design identical to a certified package design	\$1,000
	(b) having an "A" value greater than 1 and not exceeding 10 with no fissile material	
	(i) assessment of a Initial package design	\$12,000
	(ii) assessment of a package design similar to a certified package design	\$4,000
	(iii) assessment of a package design identical to a certified package design	\$1,000
	(c) having an "A" value greater than 1 and not exceeding 10 with fissile material	
	(i) assessment of a Initial package design	\$20,000
	(ii) assessment of a package design similar to a certified package design	\$6,650
	(iii) assessment of a package design identical to a certified package design	\$1,000
	(d) having an "A" value greater than 10 and not exceeding 100 with no fissile material	
	(i) assessment of a Initial package design	\$14,000
	(ii) assessment of a package design similar to a certified package design	\$4,650
	(iii) assessment of a package design identical to a certified package design	\$1,000
	(e) having an "A" value greater than 10 and not exceeding 100 with fissile material	
	(i) assessment of a Initial package design	\$22,000
	(ii) assessment of a package design similar to a certified package design	\$7,350
	(iii) assessment of a package design identical to a certified package design	\$1,000

CNSC 2017-2018 Cost Recovery Fees Schedule

FIXED FEES	
Column 1	Column 2
Item	Type of Application
	Fees Payable for 2017-2018
	(f) having an "A" value greater than 100 and not exceeding 3000 with no fissile material
	(i) assessment of a Initial package design \$20,000
	(ii) assessment of a package design similar to a certified package design \$6,650
	(iii) assessment of a package design identical to a certified package design \$1,000
	(g) having an "A" value greater than 100 and not exceeding 3000 with fissile material
	(i) assessment of a Initial package design \$28,000
	(ii) assessment of a package design similar to a certified package design \$9,300
	(iii) assessment of a package design identical to a certified package design \$1,000
	(h) having an "A" value greater than 3000 with no fissile material
	(i) assessment of a Initial package design \$24,000
	(ii) assessment of a package design similar to a certified package design \$8,000
	(iii) assessment of a package design identical to a certified package design \$1,000
	(i) having an "A" value greater than 3000 with fissile material
	(i) assessment of a Initial package design \$32,000
	(ii) assessment of a package design similar to a certified package design \$10,650
	(iii) assessment of a package design identical to a certified package design \$1,000
3	An application for certification of a radiation device model
	(a) Type 1 — A device containing nuclear substances in a quantity greater than the exemption quantity and less than 10 times that quantity
	(i) assessment of a Initial radiation device model \$1,500
	(ii) assessment of a radiation device model similar to a certified radiation device model \$1,000
	(iii) assessment of a radiation device model identical to a certified radiation device model \$1,000
	(b) Type 2 — A device containing nuclear substances in a quantity equal to or exceeding 10 times the exemption quantity for the following: bone mineral analysis, dew point detection, electronic component testing, fuel gauging, low energy imaging, liquid scintillation counting, radioluminescence, static detection, static elimination, smoke detection, surge voltage protection and X-ray fluorescence analysis
	(i) assessment of a Initial radiation device model \$3,000
	(ii) assessment of a radiation device model similar to a certified radiation device model \$1,000
	(iii) assessment of a radiation device model identical to a certified radiation device model \$1,000

CNSC 2017-2018 Cost Recovery Fees Schedule

FIXED FEES	
Column 1	Column 2
Item	Fees Payable for 2017-2018
(c) Type 3 — A device containing nuclear substances in a quantity equal to or exceeding 10 times the exemption quantity for the following: beta	
(i) assessment of a Initial radiation device model	\$6,000
(ii) assessment of a radiation device model similar to a certified radiation device model	\$2,000
(iii) assessment of a radiation device model identical to a certified radiation device model	\$1,000
(d) Type 4 — A device of the following type: industrial radiography device, self-shielded irradiator and neutron activator	
(i) assessment of a Initial radiation device model	\$9,000
(ii) assessment of a radiation device model similar to a certified radiation device model	\$3,000
(iii) assessment of a radiation device model identical to a certified radiation device model	\$1,000
4	An application for certification of Class II prescribed equipment
	(i) assessment of Initial Class II prescribed equipment
	(ii) assessment of Class II prescribed equipment similar to certified Class II prescribed equipment
	(iii) assessment of Class II prescribed equipment identical to certified Class II prescribed equipment
5	An application for certification of an exposure device operator
NOTE: "A" value" means the maximum number obtained by dividing the quantity of radioactivity in the package design by the appropriate "A ₁ " or "A ₂ " value as defined in the <i>Packaging and Transport of Nuclear Substances Regulations</i> .	