



## **Certification of Class II Prescribed Equipment**

The Canadian Nuclear Safety Commission (CNSC) regulates the use of nuclear energy and materials to protect the health, safety and security of Canadians and the environment; and to respect Canada's international commitments on the peaceful use of nuclear energy.

The [\*Nuclear Safety and Control Act\*](#) empowers the CNSC to certify the use of Class II prescribed equipment. The [\*Class II Nuclear Facilities and Prescribed Equipment Regulations\*](#) stipulate regulatory requirements for certification.

Certified Class II prescribed equipment is commonly used for medical diagnosis and treatment. These include such items as cyclotrons, accelerators, beam irradiators, teletherapy units, and radiotherapy equipment.

A certificate issued by the CNSC for equipment applies to a specific model design with precise operating conditions only. Any future changes to the design or use may require recertification of the prescribed equipment.

What follows is the list of Class II prescribed equipment that is certified by the CNSC for use in Canada as of January 2012.



## Class II Prescribed Equipment Certificates

Certificate Number	Prescribed Equipment Description	Use Type	Activity	Energy	Power	Issue Date	Expiry Date
C2-002-0020-0-2016	Guidant Galileo Intravascular Radiotherapy Device	High dose rate afterloader	22,200 MBq	n/a	n/a	2001-05-08	2016-04-03
C2-005-0002-0-2019	MDS Nordion Eldorado 6 NRC Calibration Irradiator Serial Number 209	Irradiator - Class II	244 TBq	n/a	n/a	2005-01-13	2019-11-30
C2-005-0003-0-2022	MDS Nordion modified Theratron T60 (serial A-117)	Irradiator - Class II	148 TBq	n/a	n/a	2007-05-08	2022-04-30
C2-005-0004-0-2021	MDS Nordion Theratron Equinox 80	Teletherapy machine	555 TBq	n/a	n/a	2006-12-11	2021-11-30
C2-005-0005-0-2022	MDS Nordion Gammabeam X200	Irradiator - Class II	555 TBq	n/a	n/a	2007-02-07	2022-01-31
C2-005-0006-0-2021	MDS Nordion Theratron Equinox 100	Teletherapy machine	555 TBq	n/a	n/a	2006-12-11	2021-11-30
C2-005-0027-1-2036	MDS Nordion Gammabeam 150C	Irradiator - Class II	185 TBq	n/a	n/a	2011-12-01	2036-11-30
C2-005-0083-2-2015	MDS Nordion Eldorado 6	Teletherapy irradiator	167 TBq	n/a	n/a	2001-05-04	2015-11-30
C2-005-0229-2-2015	MDS Nordion Theratron Junior C-II	Teletherapy irradiator	111 TBq	n/a	n/a	2002-03-20	2015-11-30
C2-005-0319-3-2015	MDS Nordion Eldorado 8	Teletherapy irradiator	496 TBq	n/a	n/a	2002-10-29	2015-11-30
C2-005-0409-1-2015	MDS Nordion Theratron Elite 100	Teletherapy irradiator	555 TBq	n/a	n/a	2002-03-20	2015-11-30
C2-005-0432-1-2015	MDS Nordion Theratron Elite 80	Teletherapy irradiator	555 TBq	n/a	n/a	2002-03-20	2015-11-30
C2-005-0465-2-2015	MDS Nordion Theratron 780	Teletherapy irradiator	555 TBq	n/a	n/a	2002-03-20	2015-11-30
C2-005-0466-2-2015	MDS Nordion Theratron 780-E	Teletherapy irradiator	555 TBq	n/a	n/a	2002-03-20	2015-11-30
C2-005-1297-2-2015	MDS Nordion Theratron 780-C	Teletherapy irradiator	555 TBq	n/a	n/a	2002-03-20	2015-11-30
C2-005-1298-2-2015	MDS Nordion Theratron 1000	Teletherapy irradiator	555 TBq	n/a	n/a	2002-03-20	2015-11-30
C2-005-1299-0-2015	MDS Nordion Theratron 1000-A	Teletherapy irradiator	555 TBq	n/a	n/a	2002-03-20	2015-11-30
C2-005-1300-0-2015	MDS Nordion Theratron 1000E	Teletherapy irradiator	555 TBq	n/a	n/a	2002-03-20	2015-11-30
C2-005-1365-1-2015	MDS Nordion Theratron Phoenix	Teletherapy irradiator	444 TBq	n/a	n/a	2002-03-20	2015-11-30
C2-005-1455-2-2017	MDS Nordion F-144 AC	Irradiator - Class II	16 TBq	n/a	n/a	2004-04-29	2017-04-30
C2-041-0001-2-2100	Texas Nuclear Neutron Generator 150-1H	Neutron generator	n/a	150 keV	2 mA	2011-01-01	2100-11-30
C2-049-0001-1-2017	Elekta Leksell Gamma Knife, Model 23004 - Type B2 Model C & 4C	Teletherapy irradiator	245 TBq	n/a	n/a	2005-03-23	2017-06-30
C2-049-0002-0-2019	Elekta Precise Digital Accelerator	Medical accelerator	n/a	25 MV	n/a	2004-04-13	2019-03-31
C2-049-0003-0-2020	Elekta Synergy Platform	Medical accelerator	n/a	25 MV	n/a	2005-01-17	2020-01-31
C2-049-0004-0-2020	Elekta Synergy System / Elekta Synergy S System	Medical accelerator	n/a	25 MV	n/a	2005-08-26	2020-08-31



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C2-049-0005-0-2022	Elekta Leksell Gamma Knife PERFEXION	Teletherapy machine	244 TBq	n/a	n/a	2007-03-29	2022-02-28
C2-049-0013-0-2017	Elekta/Philips Precise	Medical accelerator	n/a	25 MV	n/a	2002-07-23	2017-06-30
C2-049-0014-1-2017	Philips SL20	Medical accelerator	n/a	20 MV	n/a	2010-09-24	2017-06-30
C2-049-0015-0-2023	Elekta Synergy System	Medical accelerator	n/a	25 MV	n/a	2009-01-14	2023-11-30
C2-049-0016-0-2023	Elekta Synergy S System	Medical accelerator	n/a	25 MV	n/a	2009-01-14	2023-11-30
C2-049-0017-0-2025	Elekta Infinity™	Medical accelerator	n/a	25 MV	n/a	2010-06-09	2025-05-31
C2-049-0047-1-2017	Philips SL25	Medical accelerator	n/a	25 MV	n/a	2010-09-24	2017-06-30
C2-050-0072-1-2015	Picker CS-600, Model 6152	Teletherapy irradiator	45 TBq	n/a	n/a	2001-05-07	2015-11-26
C2-050-0140-1-2015	Picker CS-600, Ceiling Mounted Teletherapy Unit, Head Only, Cat. No. 592	Teletherapy irradiator	60 TBq	n/a	n/a	2001-05-07	2015-11-26
C2-057-0001-0-2018	Siemens ONCOR Impression Plus	Medical accelerator	n/a	25 MV	n/a	2003-12-01	2018-11-30
C2-057-0004-1-2018	Siemens Mevatron KDS-2	Medical accelerator	n/a	20 MV	n/a	2007-02-28	2018-11-30
C2-057-0005-0-2018	Siemens Oncor Impression	Medical accelerator	n/a	11MeV	n/a	2004-01-22	2018-11-30
C2-057-0006-1-2019	Siemens ONCOR Avant-Garde	Medical accelerator	n/a	25 MV	n/a	2007-02-28	2019-09-30
C2-057-0007-0-2022	Siemens Eclipse Cyclotron RD Type	Cyclotron	n/a	11 MeV	80 µA	2007-09-06	2022-08-31
C2-057-0011-0-2023	Siemens Eclipse HP Cyclotron	Cyclotron	n/a	11 MeV	80 µA	2008-01-11	2023-01-31
C2-057-0014-0-2021	Siemens ONCOR Expression Digital Linear Accelerator	Medical accelerator	n/a	25 MV	n/a	2006-12-18	2021-11-30
C2-057-0015-0-2023	Siemens Artiste MV SA	Medical accelerator	n/a	21 MeV	900 MU/min	2008-09-02	2023-08-31
C2-057-0024-2-2015	Siemens Mevatron KD-2	Medical accelerator	n/a	20 MV	n/a	2002-10-29	2015-11-30
C2-057-0080-4-2015	Siemens Mevatron MD-2	Medical accelerator	n/a	15 MV	n/a	2007-02-28	2015-11-30
C2-057-0091-2-2015	Siemens Mevatron 77	Medical accelerator	n/a	15 MV	n/a	2002-10-29	2015-11-30
C2-057-0103-2-2015	Siemens Primus	Medical accelerator	n/a	20 MV	n/a	2002-10-29	2015-11-30
C2-057-0204-2-2015	Siemens Mevatron KD-2	Medical accelerator	n/a	23 MV	n/a	2002-10-29	2015-11-30
C2-068-0003-0-2023	Varian Silhouette System	Medical accelerator	n/a	20 MV	n/a	2008-01-31	2023-01-31
C2-068-0004-1-2023	Varian Trilogy System	Medical accelerator	n/a	25 MV	n/a	2009-10-19	2023-01-31
C2-068-0005-0-2023	Varian Clinac iX	Medical accelerator	n/a	20 MV	n/a	2008-01-31	2023-01-31
C2-068-0006-0-2024	Varian Novalis Tx Linear Accelerator	Medical accelerator	n/a	25 MV	n/a	2009-10-19	2024-10-31
C2-068-0012-2-2017	Varian GammaMed Plus	High dose rate afterloader	555 GBq	n/a	n/a	2004-06-01	2017-12-31
C2-068-0013-1-2023	Varian GammaMed Plus iX	High dose rate afterloader	555 GBq	n/a	n/a	2008-01-25	2023-01-31
C2-068-0017-0-2023	Varian VariSource iX HDR Remote Afterloader	High dose rate afterloader	407 GBq	n/a	n/a	2008-07-07	2023-06-30



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C2-068-0228-3-2015	Varian VariSource HDR Remote Afterloader	High dose rate afterloader	407 GBq	n/a	n/a	2003-01-29	2015-11-30
C2-068-1128-4-2015	Varian Clinac 2100C	Medical accelerator	n/a	18 MV	n/a	2006-02-27	2015-11-30
C2-068-1139-4-2015	Varian Clinac 2100C/D	Medical accelerator	n/a	18 MV	n/a	2006-02-27	2015-11-30
C2-068-1151-2-2015	Varian Clinac 1800	Medical accelerator	n/a	18 MV	n/a	2002-10-29	2015-11-30
C2-068-1162-2-2015	Varian Clinac 21EX	Medical accelerator	n/a	18 MV	n/a	2002-10-29	2015-11-30
C2-068-1163-3-2015	Varian Clinac 23EX	Medical accelerator	n/a	20 MV	n/a	2004-02-02	2015-11-30
C2-068-1173-3-2015	Varian Clinac 2300C/D	Medical accelerator	n/a	20 MV	n/a	2004-02-02	2015-11-30
C2-068-1174-0-2035	Varian TrueBeam™	Linear accelerator	n/a	15 MV	n/a	2010-10-25	2035-10-31
C2-068-1175-0-2035	Varian TrueBeam STx™	Linear accelerator	n/a	15 MV	n/a	2010-11-05	2035-10-31
C2-074-0003-1-2012	CTI RDS-111 "PET"	Cyclotron	n/a	11 MeV	40 µA	2002-10-30	2012-06-30
C2-074-0004-0-2018	CTI RDS-112 Cyclotron Hamilton Health Sciences Corporation	Cyclotron	n/a	11 MeV	40 µA	2003-08-14	2018-07-31
C2-093-0001-0-2012	EBCO Technologies TR-19 Cyclotron	Cyclotron	n/a	19 MeV	150 µA	2002-05-10	2012-04-30
C2-093-0002-0-2012	EBCO Technologies TR-30, TR-30/15, TR-30HC	Cyclotron	n/a	30 MeV	2000 µA	2002-06-25	2012-05-31
C2-146-0000-2-2100	High Voltage Engineering McMaster University Van de Graaff, Model KN 3000	Research accelerator	n/a	3.5 MeV	800 µA	2011-01-01	2100-11-30
C2-146-0001-0-2012	High Voltage Engineering Van de Graaff Tandem Accelerator	Research accelerator	n/a	50 MeV	20 µA	2002-09-19	2012-07-31
C2-146-0002-0-2018	High Voltage Engineering Van de Graaff, Model KN3000	Research accelerator	n/a	3 MeV	20 µA	2003-01-23	2018-12-31
C2-146-0003-0-2018	High Voltage Engineering McMaster University 1.25 MV Tandetron	Research accelerator	n/a	125 MeV	1000 µA	2003-10-28	2018-09-30
C2-146-0004-0-2018	High Voltage Engineering University of Western Ontario 1.7 MV Tandetron Accelerator, Model 4177-HC	Research accelerator	n/a	17 MeV	100 µA	2003-11-03	2018-10-31
C2-146-0005-0-2018	High Voltage Engineering Tandetron Accelerator, Model 4117 HC	Research accelerator	n/a	5 MeV	100 µA	2003-09-11	2018-08-31
C2-153-0001-0-2019	Integrated Plant Elektrokhimpriborh Neutron Generator Model TNT-1411	Geophysical logging accelerator	111 GBq	130 keV	n/a	2004-09-20	2019-08-31
C2-179-0063-3-2015	J.L. Shepherd Model #81-12B (1 of 2)	Irradiator - Class II	37 TBq	n/a	n/a	2003-10-02	2015-11-28
C2-179-0065-2-2015	J.L. Shepherd Model #81-12B	Irradiator - Class II	3700 MBq	n/a	n/a	2002-10-29	2015-11-28
C2-179-0074-1-2015	J.L. Shepherd Model #81-14R	Irradiator - Class II	440 TBq	n/a	n/a	2001-05-08	2015-11-28
C2-194-0007-0-2019	GE Medical Systems MINitrac	Cyclotron	n/a	9.6 MeV	55 µA	2004-02-09	2019-01-31



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C2-194-0010-1-2023	GE Medical Systems PETrace Platform S9120	Cyclotron	n/a	16.5 MeV	100 µA	2011-06-29	2023-10-31
C2-194-0012-1-2036	GE Medical Systems PETrace 880	Cyclotron	n/a	16.5 MeV	130 µA	2011-10-07	2036-09-30
C2-209-0001-1-2100	Vickers Electron Linear Accelerator	Research accelerator	n/a	35 MeV	70 µA	2011-03-01	2100-11-30
C2-226-0000-0-22100	NEC University of Guelph Pelletron Accelerator, Model 9SH	Research accelerator	n/a	3 MeV	75 µA	2012-01-09	2100-12-31
C2-230-0000-1-2035	Scanditronix AB Fixed Energy Cyclotron MC-17	Cyclotron	n/a	17 MeV	75 µA	2010-11-30	2035-11-30
C2-231-0001-0-2025	IBA Cyclone® platform 18	Cyclotron	n/a	18 MeV	150 µA	2010-02-10	2025-01-31
C2-234-0002-0-2021	Hopewell Designs GC60 Series Gamma Beam Irradiator	Irradiator - Class II	96.2 TBq	n/a	n/a	2006-02-24	2021-01-31
C2-234-0003-3-2022	Hopewell Designs G10-1-360 / G10-2-360	Irradiator - Class II	13 TBq	n/a	n/a	2010-11-19	2022-06-30
C2-244-0000-0-2018	McMaster University Taylor Radiobiology Irradiator	Irradiator - Class II	37 TBq	n/a	n/a	2003-12-23	2018-11-30
C2-252-0003-0-2020	Nucletron OncoSelect HDR 3	High dose rate afterloader	444 GBq	n/a	n/a	2005-05-09	2020-04-30
C2-252-0004-0-2022	Nucletron MicroSelectron Model 106.990	High dose rate afterloader	444 GBq	n/a	n/a	2007-03-29	2022-02-28
C2-252-0010-2-2015	Nucletron Selectron LDR/MDR	Low dose rate afterloader	71 GBq	n/a	n/a	2002-10-29	2015-11-30
C2-252-0043-3-2015	Nucletron MicroSelectron HDR, Model 105.999	High dose rate afterloader	444 GBq	n/a	n/a	2003-12-17	2015-11-30
C2-252-0044-2-2015	Nucletron MicroSelectron HDR Classic	High dose rate afterloader	370 GBq	n/a	n/a	2002-10-29	2015-11-30
C2-252-0054-3-2015	Nucletron MicroSelectron PDR	High dose rate afterloader	74 GBq	n/a	n/a	2004-12-17	2015-11-30
C2-252-0067-0-2013	Nucletron Flexitron 136149A02	High dose rate afterloader	814 GBq	n/a	n/a	2011-04-08	2013-03-31
C2-422-0019-2-2015	Telegyne AR 372	High dose rate afterloader	11 GBq	n/a	n/a	2003-11-13	2015-11-30
C2-452-0001-0-2019	Advanced Cyclotron Systems PET Target, Models TAL-213-F-15, TAL-213-F-20	Cyclotron	n/a	19 MeV	65 µA	2004-06-10	2019-05-31
C2-452-0002-3-2019	Advanced Cyclotron Systems TR-PET Series Models TR13, TR14, TR19, TR9D, TR19/9	Cyclotron	n/a	19 MeV	300 µA	2005-01-20	2019-10-31
C2-452-0003-0-2019	Advanced Cyclotron Systems TR-30 Series Models TR-30, TR-30/15, TR-30HC	Cyclotron	n/a	30 MeV	2000 µA	2004-12-01	2019-11-30
C2-452-0004-0-2024	Advanced Cyclotron Systems TR 24	Cyclotron	n/a	24 MeV	750 µA	2009-01-23	2024-01-31
C2-459-0001-0-2019	VNIIA Model ING-101	Geophysical logging accelerator	185 GBq	60 keV	n/a	2004-12-24	2019-11-30
C2-465-0001-0-2020	EADS-Sodern Down-Hole Neutron Analyzer with NEM 16D Neutron Generator	Geophysical logging accelerator	120 GBq	110 keV	n/a	2005-07-20	2020-06-30



Certificate Number	Prescribed Equipment Description	Use Type	Activity	Energy	Power	Issue Date	Expiry Date
C2-465-0002-1-2024	EADS-Sodern Controlled Neutron Analyzer Model Gen-3	Neutron generator	n/a	111 keV	n/a	2009-09-10	2024-06-30
C2-483-0001-1-2023	Isodose Control Flexitron 09-00-112 and 09-00-102	High dose rate afterloader	814 GBq	n/a	n/a	2008-12-01	2023-01-31
C2-488-0004-0-2015	Best Theratronics Theratron Phoenix	Teletherapy irradiator	444 TBq	n/a	n/a	2009-11-10	2015-08-31
C2-488-0005-0-2021	Best Theratronics Theratron Equinox 80	Teletherapy machine	555 TBq	n/a	n/a	2009-11-10	2021-08-31
C2-488-0006-0-2021	Best Theratronics Theratron Equinox 100	Teletherapy irradiator	555 TBq	n/a	n/a	2009-11-10	2021-08-31
C2-488-0007-0-2024	Best Theratronics Eldorado 78	Teletherapy irradiator	496 TBq	n/a	n/a	2010-01-08	2024-11-30
C2-489-0001-1-2023	Eckert & Ziegler MultiSource Model 1321-0001	High dose rate afterloader	481 GBq	n/a	n/a	2008-08-05	2023-06-30
C2-489-0002-1-2023	Eckert & Ziegler MultiSource Model 1321-0002	High dose rate afterloader	481 GBq	n/a	n/a	2009-01-20	2023-06-30
C2-494-0001-0-2024	Halliburton Model 013-1004-000	Geophysical logging accelerator	111 GBq	111 keV	n/a	2009-07-28	2024-06-30
C2-505-0001-0-2035	MDS (Canada) JS-8900 (IR-108)	Irradiator - Class II	171 PBq	n/a	n/a	2010-10-26	2035-10-31
C2-505-0002-0-2035	MDS (Canada) JS-8900 (IR-147)	Irradiator - Class II	111 PBq	n/a	n/a	2010-10-26	2035-10-31
C2-505-0003-0-2035	MDS (Canada) 651 PT	Irradiator - Class II	5500 TBq	n/a	n/a	2010-10-26	2035-10-31
C2-506-0001-0-2031	Hôpital Maisonneuve-Rosemont Eldorado 78 serial number 23	Teletherapy irradiator	496 TBq	n/a	n/a	2011-07-29	2031-06-30
C2-507-0001-1-2036	Thermo Scientific Model B 320	Neutron generator	n/a	90 keV	n/a	2011-07-06	2036-05-31
C2-507-0002-0-2036	Thermo Scientific Model B 320	Neutron generator	n/a	130 keV	n/a	2011-12-19	2036-11-30
C2-508-0001-0-2036	Siemens AG ONCOR Impression Plus	Medical accelerator	n/a	25 MV	n/a	2011-06-20	2036-05-31
C2-508-0003-0-2036	Siemens AG ONCOR Expression Digital Linear Accelerator	Medical accelerator	n/a	25 MV	n/a	2011-06-20	2036-05-31
C2-508-0004-0-2036	Siemens AG Mevatron MD-2	Medical accelerator	n/a	15 MV	n/a	2011-06-20	2036-05-31
C2-508-0005-0-2036	Siemens AG ONCOR Avant-Garde	Medical accelerator	n/a	25 MV	n/a	2011-06-20	2036-05-31
C2-508-0006-0-2036	Siemens AG Oncor Impression	Medical accelerator	n/a	15 MV	n/a	2011-06-20	2036-05-31
C2-508-0007-0-2036	Siemens AG Mevatron KDS-2	Medical accelerator	n/a	20 MV	n/a	2011-06-20	2036-05-31
C2-508-0008-0-2036	Siemens AG Primus	Medical accelerator	n/a	20 MV	n/a	2011-06-20	2036-05-31
C2-508-0009-0-2036	Siemens AG Mevatron 77	Medical accelerator	n/a	15 MV	n/a	2011-06-20	2036-05-31
C2-508-0010-0-2036	Siemens AG Mevatron KD-2	Medical accelerator	n/a	23 MV	n/a	2011-06-20	2036-05-31
C2-513-0001-0-2036	Adelphi Technology DD-109 Neutron Generator for AECL	Neutron generator	n/a	130 MV	n/a	2011-12-20	2036-11-30



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C2-678-0001-1-2016	Novoste Model A1000 Series for use with Beta Cath System	Intravascular brachytherapy	4440 MBq	n/a	n/a	2002-11-25	2016-10-31
C2-678-0002-0-2016	Novoste Model A1000 Series for use with Corona Cath System	Intravascular brachytherapy	4440 MBq	n/a	n/a	2003-01-07	2016-10-31
C2-682-0001-0-2015	Baker Hughes Model 186235	Neutron generator	74 GBq	n/a	n/a	2001-05-03	2015-11-30
C2-683-0001-0-2015	MF Physics Corporation Model A-320	Neutron generator	92.5 GBq	n/a	n/a	2001-07-04	2015-11-30
C2-684-0001-0-2015	EMR Photoelectric, Model 758, 761, 762	Neutron generator	370 GBq	n/a	n/a	2001-07-04	2015-11-30