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Licence Conditions Handbook

SRB TECHNOLOGIES (CANADA) INC.

**Nuclear Substance Processing Facility Licence
(NSPFL)**

NSPFL-13.00/2034

Revision 0



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Licence Conditions Handbook
LCH-NSPFL-13.00/2034
SRB Technologies (Canada) Inc.
Nuclear Substance Processing Facility
Licence
NSPFL-13.00/2034

Effective: July 26, 2022

SIGNED at OTTAWA this 26th day of July 2022

Andrew McAllister, Director
Nuclear Processing Facilities Division
Directorate of Nuclear Cycle and Facilities Regulation
Canadian Nuclear Safety Commission

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Introduction

The general purpose of the Licence Conditions Handbook (LCH) is to identify and clarify the relevant parts of the licensing basis for each licence condition (LC). This will help ensure that SRB Technologies (Canada) Inc. (SRBT) will maintain facility operations in accordance with the licensing basis for the SRBT facility and the intent of the licence. The LCH should be read in conjunction with the licence.

The LCH typically has three parts under each LC: the Preamble, Compliance Verification Criteria (CVC), and Guidance. The Preamble explains, as needed, the regulatory context, background, and/or history related to the LC. CVC are criteria used by Canadian Nuclear Safety Commission (CNSC) staff to verify and oversee compliance with the LC. Guidance is non-mandatory information, including direction on how to comply with the LC.

The statement “a person authorized by the Commission” in the LCs or the LCH indicates that the Commission may delegate certain authority to CNSC staff. Unless otherwise specified, the delegation of authority by the Commission to act as a person authorized by the Commission is only applied to the incumbents in the following positions:

- Director, Nuclear Processing Facilities Division
- Director General, Directorate of Nuclear Cycle and Facilities Regulations
- Executive Vice-President and Chief Regulatory Operations Officer, Regulatory Operations Branch

The links provided in the LCH by e-Access numbers are references to the internal CNSC electronic filing system, and those documents cannot be opened from outside of the CNSC network.

Current versions of the licensing basis publications, licensee documents that require notification of change and guidance documents referenced in the LCH are tracked in the document *SRBT Written Notification Document Tracking Sheet (Licence NSPFL-13.00/2034)* (e-Doc 4472953), which is controlled by the Nuclear Processing Facilities Division (NPDF) and is available to the licensee upon request.

Most CNSC documents referenced in the LCH are available through the [CNSC website](#). Documents listed on CNSC website may contain prescribed information as defined by the [General Nuclear Safety and Control Regulations](#) (GNSCR). Information in these documents will be made available only to stakeholders with appropriate security clearance on a valid need to know.

Domestic and international standards (in particular consensus standards produced by the CSA Group) are an important component of the CNSC's regulatory framework. Standards support the regulatory requirements established through the [Nuclear Safety and Control Act](#) (NSCA), its regulations and licences by setting out the necessary elements for acceptable design and performance at a regulated facility or a regulated activity. Standards are one of the tools used by the CNSC to evaluate whether licensees are qualified to carry out licensed activities.

INTRODUCTION

The CNSC offers complimentary access to the CSA Group [suite of nuclear standards](#) through the CNSC website. This access platform allows interested stakeholders to view these standards online through any device that can access the Internet. Standards applicable to the licensees are documented in the CVC or guidance as appropriate.

This LCH has the two appendices:

- Appendix A, which provides definitions of terms and a list of acronyms used throughout this LCH.
- Appendix B, which provides a list of version controlled documents referenced in this LCH.

This licence authorizes the licensee to:

- (a) operate a Class IB Facility, comprising of a tritium processing facility, at the location referred to in Section II of this licence (hereinafter “the facility”) for the purposes of manufacturing radiation devices;
- (b) produce, possess, transfer, service and use, radiation devices arising from the activities described in (a);
- (c) possess, transfer, use, process, manage, store and dispose nuclear substances that are required for, associated with, or arise from the activities described in (a);
- (d) the possession of tritium up to a limit of 6000 terabecquerels of tritium in any form;
- (e) possess, and use prescribed information that is required for, associated with, or arise from the activities described in (a).

The SRB Technologies (SRBT) facility is located at 320 Boundary Road, Suite 140, Pembroke, Ontario, further defined in drawing “SRBT Building Floor Plan – September 2017” (e-Doc 5337989).

GENERAL

Licence Condition G.1: Licensing Basis for Licensed Activities

The licensee shall conduct the activities described in Part IV of this licence in accordance with the licensing basis, defined as:

- (i) the regulatory requirements set out in the applicable laws and regulations**
- (ii) the conditions and safety and control measures described in the facility's or activity's licence and the documents directly referenced in that licence**
- (iii) the safety and control measures described in the licence application and the documents needed to support that licence application;**

unless otherwise approved in writing by the Canadian Nuclear Safety Commission (hereinafter “the Commission”).

Preamble:

The licensing basis sets the boundary conditions for acceptable performance at a regulated facility or activity, and thus establishes the basis for the CNSC’s compliance program with respect of that regulated facility or activity. The degree to which the regulatory requirements are applied to the SRBT facility should reflect their importance to the health and safety of persons, environment, national security, international obligations to which Canada has agreed, licensee’s quality and economic expectations, the complexity of facility or activity, and the possible consequences if accidents occur or the activity is carried out incorrectly.

Where the LC requires the licensee to implement and maintain a particular program, the documents submitted by the licensee to support their application that describe and implement the program are part of the licensing basis.

Compliance Verification Criteria:

Regulatory Role of the Licensing Basis

The licensing basis is established when the Commission renders its decision regarding the licence application. LC G.1 requires the licensee to conduct the licensed activities in accordance with the licensing basis. For activities that are not in accordance with the licensing basis, the licensee shall take action as soon as practicable to return to a state consistent with the licensing basis, taking into account the risk significance of the situation.

The licensing basis is not intended to unduly inhibit the ongoing management and operation of the facility or the licensee’s ability to adapt to changing circumstances and continuously improve, in accordance with its management system.

Part (i) of the Licensing Basis

Part (i) of the licensing basis refers to applicable laws and regulations. There are many federal and provincial acts and regulations, and international laws, agreements, guidelines, etc., applicable to activities performed at the SRBT facility.

The laws, regulations and international agreements for which CNSC has a regulatory role are:

- [Nuclear Safety and Control Act](#) (NSCA) and its Regulations
- [Impact Assessment Act](#) and its Regulations
- [Canadian Environmental Protection Act, 1999](#)
- [Nuclear Liability and Compensation Act](#)
- [Transportation of Dangerous Goods Act](#) and its Regulations
- [Radiation Emitting Devices Act](#)
- [Canada/IAEA Safeguards Agreements](#)
- [Canada Labour Code, Part II](#)

Part (ii) of the Licensing Basis

Part (ii) of the licensing basis refers to the conditions and the safety and control measures included in the licence and in the documents directly referenced in the licence.

Under the standardized format and content, the licence requires the licensee to implement and maintain certain programs. There are no documents directly referenced in the standardized SRBT licence. For the purpose of a licence requirement, a program may be a series of documented, coordinated activities, not necessarily a single document.

Part (iii) of the Licensing Basis

Part (iii) of the licensing basis consists of the safety and control measures described in the licence application and in the documents in support of that licence application. The safety and control measures include important aspects of that documentation, as well as important aspects of analysis, design, operation, etc. They may be found in high-level, programmatic licensee documents but might also be found in lower-level, supporting licensee documentation. LC G.1 requires the licensee to conform to, and/or implement, all these safety and control measures.

Part (iii) of the licensing basis also includes the safety and control measures in the standards, codes and CNSC regulatory documents referenced in the application or in the licensee's supporting documentation. Note, however, this does not mean that all details in these referenced documents are part of the licensing basis; some of these documents may contain administrative, informative or guidance sections that are not considered to be part of the licensing basis.

Applicable licensee documents are listed in the LCH under the heading “Licensee Documents that Require Notification of Change”. Applicable CNSC regulatory documents, CSA standards and other documents are listed in the LCH under the heading “Licensing Basis Publications”. The documents listed in the LCH could cite other documents that also contain safety and control measures. Applicable licensing basis publications are listed in tables in this LCH under the most relevant LC. All “shall” or normative statements in licensing basis publications are considered CVC unless stated otherwise. If any “should” or informative statements in licensing basis publications are also considered CVC, this is also explained under the most relevant LC.

Details that are not directly relevant to safety and control measures for facilities or activities authorized by the licence are excluded from the licensing basis. Details that are relevant to a different safety and control area (i.e., not the one associated with the main document), are only part of the licensing basis to the extent they are consistent with the main requirements for both safety and control areas.

In the event of any perceived or real conflict or inconsistency between two elements of the licensing basis, the licensee shall consult CNSC staff to determine the approach to resolve the issue.

CNSC Staff’s Approach to Assessing the Licensing Basis for SRBT

In accordance with LC G.2, SRBT will submit relevant documentation for CNSC staff review regarding proposed changes to the facility or its operation, including deviation from design, operating conditions, policies, programs and methods referred to in the licensing basis. This includes, but is not limited to changes to equipment, processes, supporting activities, specific licensee documentation or any other item considered a safety or control measure under the licensing basis. There are specific licensee documents listed in the LCH, which require written notification every time a new version of the document is approved by SRBT. CNSC staff will review the information submitted by SRBT to confirm SRBT’s assessment that the proposed change remains within the licensing basis. CNSC staff assess whether a proposed change is within the licensing basis based on changes or impact on the overall safety at the SRBT facility. SRBT may proceed with the proposed initiatives if they are found to be within the licensing basis.

Any proposed activity, facility or other change, which CNSC staff consider to be outside the licensing basis, will be discussed with SRBT and should SRBT choose to proceed with the change, CNSC staff will submit the matter to the Commission for consideration. If the Commission grants approval to the change, it will become part of the licensing basis for SRBT and will be reflected in updates to LCH as appropriate.

Licence Application Documents and Supporting Documents

Submission Date	Document Title	e-Doc
June 30, 2021	Cover Letter – SRBT NSPFOL-13.00 2022 Renewal Application	6596831
June 30, 2021	NSPFOL-13.00/2022 – SRBT Licence Renewal Application (June 30, 2021)	6596805

Guidance:

Guidance Documents

Document Number	Document Title	Version
REGDOC-3.5.3	Regulatory Fundamentals	2018

When the licensee becomes aware that a proposed change or activity might not be in accordance with the licensing basis, it should first seek direction from CNSC staff regarding the potential acceptability of this change or activity. The licensee should take into account that certain types of proposed changes might require significant lead times before CNSC staff can make recommendations and/or the Commission can properly consider them. Guidance for notifications to CNSC related to licensee changes are discussed under LC G.2.

Licence Condition G.2: Notification of Changes

The licensee shall give written notification of changes to the facility or its operation, including deviation from design, operating conditions, policies, programs and methods referred to in the licensing basis.

Preamble:

CNSC staff track the version history of licensee documents that require notification of change in document *SRBT Written Notification Document Tracking Sheet (Licence NSPFL-13.00/2034)* (e-Doc 4472953) (with the exception of security-related documents).

The objective of the licensing basis, as defined in the LCH under LC G.1, is to set the boundary conditions for acceptable performance at the facility. The licensee is encouraged to make continuous improvements to their programs and documents throughout the licensing period as long as they remain within the licensing basis authorized by the Commission.

Compliance Verification Criteria:

Written notification is a physical or electronic communication from a person authorized to act on behalf of the licensee to the CNSC.

Under the licensee's management system, a change control process requires justifying changes and the review of changes by relevant stakeholders. Proposed changes with the potential to negatively impact designs, operating conditions, policies, programs, methods, or other elements that are integral to the licensing basis, are documented and written notification of the change shall be provided to the CNSC. Written notifications shall include a summary description of the change, the rationale for the change, expected duration (if not a permanent change), and a summary explanation of how the licensee has concluded that the change remains in accordance with the licensing basis (e.g., an evaluation of the impact on health, safety, security, the environment and Canada's international obligations). A copy of the revised document shall accompany the notification. All written notifications shall be transmitted to CNSC per established communications protocols.

Many changes for which the licensee shall notify the CNSC are captured as changes to licensee documents under part (iii) of the licensing basis. The LCH identifies specific documents that require written notification under the most relevant LC. However, other documents identified in the application or in the licensee’s supporting documentation may require notification of change if they describe safety and control measures applicable to the licensing basis. For example, if a licensee document in the CVC refers to another document, including a third-party document, without citing the revision number of that document, if that document changes and the licensee uses the revised version, the licensee shall determine if it is necessary to notify the CNSC of the change.

The documents needed to support the licence application may include documents produced by third parties (e.g., reports prepared by third party contractors). Changes to these documents require written notification to the CNSC only if the new version continues to form part of the licensing basis. That is, if the licensee implements a new version of a document prepared by a third party, it shall inform the CNSC of the change(s), per LC G.2. On the other hand, if a third party has updated a certain document, but the licensee has not adopted the new version as part of its safety and control measures, the licensee is not required to inform the CNSC that the third party has changed the document.

Licensee documents listed in the CVC of the LCH are subdivided into groups having different requirements for notification of change

Category	Definition
PN	Prior notification - The licensee shall submit the notice to the CNSC prior to implementing the change; typically, the requirement is to submit the proposed changes 30 days prior to planned implementation; however the licensee shall allow sufficient time for the CNSC to review the change proportionate to its complexity and the importance of the safety and control measures being affected
NT	Notification - The licensee shall submit the notice at time of making the change

Notification of some proposed changes (i.e., engineered physical changes, new processes/activities for the facility) may not be best captured through an update to a licensee document. In these cases, a standalone submission may be made that includes the summary description of the change, the rationale for the change, expected duration (if not a permanent change), and a summary explanation of how the licensee has concluded that the change remains in accordance with the licensing basis.

Changes that are not clearly in the safe direction require further assessment of impact to determine if Commission approval is required in accordance with LC G.1.

Guidance:

For proposed changes that would not be in accordance with the licensing basis, the Guidance for LC G.1 applies.

Licence Condition G.3: Financial Guarantee

The licensee shall maintain a financial guarantee for decommissioning that is acceptable to the Commission.

Preamble:

The [General Nuclear Safety and Control Regulations](#) requires that a licence application contain a description of any proposed financial guarantee relating to the activity to be licensed. The licensee is responsible for all costs of decommissioning at the facility. All such costs are included in the licensee’s decommissioning cost estimates and are covered by the licensee’s financial guarantee for decommissioning.

The licensee’s cost estimate for decommissioning should be based on the facility’s most up-to-date preliminary decommissioning plans. The facility’s current financial guarantee is covered by an irrevocable letter of credit for the full value of the estimated decommissioning cost.

Compliance Verification Criteria:

Licensing Basis Publication

Document Number	Document Title	Version	Implementation Date
REGDOC-3.3.1	Financial Guarantees for Decommissioning of Licensed Activities	2021	November 2024

Licence Documents that Require Notification of Change

Document Number	Document Title	Notification
N/A	Preliminary Decommissioning Plan – SRBT (November 29, 2019)	PN

The licensee shall report annually to confirm that their financial guarantee for decommissioning remains, valid, in effect and sufficient to meet the decommissioning needs according to the current PDP. The licensee shall submit this report as part of the Annual Compliance Report, or at any time as the Commission may request.

Guidance:

None provided.

Licence Condition G.4: Public Information and Disclosure

The licensee shall implement and maintain a public information and disclosure program.

Preamble:

The [*Class I Nuclear Facilities Regulations*](#) requires that an application for a licence contain the proposed program to inform persons living in the vicinity of the site of the general nature and characteristics of the anticipated effects on the environment and the health and safety of persons that may result from the activity to be licensed.

The primary goal of a public information and disclosure program is to ensure that information related to the health, safety and security of persons and the environment, and other issues associated with the lifecycle of the nuclear facilities are effectively communicated to the public. In addition, the program shall include a commitment to a disclosure protocol for ongoing, timely communication of information related to the licensed facility during the course of the licence period.

This LC requires the licensee to implement and maintain a public information and disclosure program to improve the public’s level of understanding about the SRBT facility’s activities.

Compliance Verification Criteria:

Licensing Basis Publication

Document Number	Document Title	Version	Implementation Date
REGDOC-3.2.1	Public Information and Disclosure	2018	Implemented

Licensee Documents that Require Notification of Change

Document Number	Document Title	Notification
N/A	Public Information Program	NT

Guidance:

None provided.

SCA – MANAGEMENT SYSTEM

Licence Condition 1.1: Management System

The licensee shall implement and maintain a management system.

Preamble:

The [*Class I Nuclear Facilities Regulations*](#) require that a licence application contain information on the proposed management system for the activity to be licensed, including the measures to promote and support safety culture.

The [*General Nuclear Safety and Control Regulations*](#) requires that a licence application contain the applicant’s organizational management structure, including the internal allocation of functions, responsibilities and authority.

CSA N286 *Management System Requirements for Nuclear Facilities* contains the requirements for a management system throughout the lifecycle of a nuclear facility and extends to all safety and control areas.

CSA N286.0.1 *Commentary on N286-12, Management System Requirements for Nuclear Facilities* provides background information concerning certain clauses and requirements in CSA N286. This background information can help the user clarify the context of the CSA N286 requirements.

Compliance Verification Criteria:

Licensing Basis Publication

Document Number	Document Title	Version	Implementation Date
CSA N286	Management System Requirements for Nuclear Facilities*	2012 (R2017)	Implemented
REGDOC-2.1.2	Safety Culture	2018	Implemented

*This document is applicable to all LC’s.

Licence Documents that Require Notification of Change

Document Number	Document Title	Notification
N/A	Quality Manual*	PN

*This document is applicable to all LCs.

Guidance:

Guidance Documents

Document Number	Document Title	Version
REGDOC-2.1.1	Management System	2019
CSA N286.0.1	Commentary on N286-12, Management System Requirements for Nuclear Facilities	2021

SCA – HUMAN PERFORMANCE MANAGEMENT

Licence Condition 2.1: Training Program

The licensee shall implement and maintain a training program.

Preamble:

This LC requires the licensee to develop and implement training programs for workers. It also provides the requirements regarding the program and processes necessary to support responsibilities of, qualifications and requalification training of persons at the nuclear facility.

As defined by the [General Nuclear Safety and Control Regulations](#), a worker is a person who performs work that is referred to in a licence. This includes contractors and temporary employees. Training requirements apply equally to these types of workers as to the licensee’s own employees. The GNSCR require that licensees ensure that there are a sufficient number of properly trained and qualified workers to conduct the licensed activities safely.

The [Class I Nuclear Facilities Regulations](#) require that licence applications include the proposed responsibilities of and qualification requirements and training program for workers, including the procedures for the requalification of workers; and the results that have been achieved in implementing the program for recruiting, training and qualifying workers in respect of the operation and maintenance of the nuclear facility.

The [Class I Nuclear Facilities Regulations](#) require every licensee to keep a record of the status of each worker’s qualifications, requalification and training, including the results of all tests and examinations completed in accordance with the licence.

Compliance Verification Criteria:

Licensing Basis Publication

Document Number	Document Title	Version	Implementation Date
REGDOC-2.2.2	Personnel Training, Version 2	2016	Implemented

Licencee Documents that Require Notification of Change

Document Number	Document Title	Notification
N/A	SRBT Training Program Manual	NT

Guidance:

Guidance Documents

Document Number	Document Title	Version
REGDOC-2.2.5	Minimum Staff Complement	2019

SCA – OPERATING PERFORMANCE

Licence Condition 3.1: Operating Program

The licensee shall implement and maintain an operating program, which includes a set of operating limits.

Preamble:

The [Class I Nuclear Facilities Regulations](#) require that a licence application contain the following information: the proposed measures, policies, methods and procedures for operating and maintaining the nuclear facility. The [Nuclear Substances and Radiation Devices Regulations](#) have requirements for records to be kept and retained for nuclear substances.

An operating program includes an up-to-date set of operating limits for the facility and activities authorized under the licence, including: production limits and limits for the possession, use, management, transfer, storage of nuclear substances, and an inventory of nuclear substances possessed under the licensees' operating licence.

Compliance Verification Criteria:

Licence Documents that Require Notification of Change

Document Number	Document Title	Notification
RSO-009	Tritium Inventory Management	NT
RSO-029	Nuclear Substances Inventory Management	NT

Operating Limits and Conditions (OLCs)

The licensee shall operate its facility in accordance with the OLCs specified in the SRBT Safety Analysis Report.

Guidance:

None provided.

Licence Condition 3.2: Reporting Requirements

The licensee shall implement and maintain a program for reporting to the Commission or a person authorized by the Commission.

Preamble:

This LC requires the licensee to implement and maintain a program for reporting information to the Commission. This includes compliance monitoring, operational performance, responses to unusual events, and notifications of various types.

The [Nuclear Safety and Control Act](#) and its applicable regulations describe reporting to the Commission or a person authorized by the Commission. Reporting requirements are found in sections 29-32 of the [General Nuclear Safety and Control Regulations](#) and section 27 of the NSCA.

The statement “a person authorized by the Commission” in the LCs or the LCH indicates that the Commission may delegate certain authority to CNSC staff. Unless otherwise specified, the delegation of authority by the Commission to act as a person authorized by the Commission is only applied to the incumbents in the following positions:

- Director, Nuclear Processing Facilities Division
- Director General, Directorate of Nuclear Cycle and Facilities Regulation
- Executive Vice-President and Chief Regulatory Officer, Regulatory Operations Branch

Compliance Verification Criteria:

Licensing Basis Publication

Document Number	Document Title	Version	Implementation Date
REGDOC-3.1.2	Reporting Requirements, Volume I: Non-Power Reactor Class I Nuclear Facilities and Uranium Mines and Mills	2018	Implemented

Licencee Documents that Require Notification of Change

Document Number	Document Title	Notification
N/A	Regulatory Reporting Program	PN

Annual Reporting

The licensee shall submit an annual compliance report by March 31 of each year, covering the operation for the 12-month period from January 1 to December 31 of the previous year that meets the requirements of section 3 of REGDOC-3.1.2.

Midterm Reporting

As noted in line 10 of the Record of Decision – DEC 22-H8 “*Application to Renew the Class IB Nuclear Substance Processing Facility Operating Licence for the Gaseous Tritium Processing Facility in Pembroke, Ontario*” (e-Doc 6821221):

The Commission directs that, at the mid-point of the 12-year licence period, SRBT shall present to the Commission a comprehensive midterm update on its licensed activities. This midterm presentation will take place in a public Commission meeting, in the vicinity of the community that hosts SRBT, and include public participation. The Commission will plan to offer participant funding for this proceeding, to take place in 2028, as determined by the Commission’s scheduling for that year.

Guidance:

Appendix B of REGDOC-3.1.2 provides a sample structure for an annual compliance monitoring report.

SCA – SAFETY ANALYSIS

Licence Condition 4.1: Safety Analysis Program

The licensee shall implement and maintain a safety analysis program.

Preamble:

The [General Nuclear Safety and Control Regulations](#) requires that a licence application contains information that includes a description and the results of any test, analysis or calculation performed to substantiate the information included in the application.

The [Class I Nuclear Facilities Regulations](#) requires that a licence application contains information that includes a final safety analysis report demonstrating the adequacy of the design of the nuclear facility, and the proposed measures, policies, methods and procedures for operating and maintaining the nuclear facility.

The implementation and maintenance of a safety analysis program includes a process to identify and assess hazards and risks on an ongoing basis. This includes identifying and evaluating new or unforeseen risks that were not considered at the planning and design stages and updating previous risk assessments by replacing important assumptions with performance data. The results of this process will be used to set objectives and targets and to develop preventative and protective measures.

Compliance Verification Criteria:

Licence Documents that Require Notification of Change

Document Number	Document Title	Notification
N/A	Safety Analysis Report	PN
N/A	Fire Hazard Assessment	PN

The licensee shall maintain the safety analysis report to ensure they adequately consider the hazards associated with the facility. The safety analysis shall be a systematic evaluation of the potential hazards associated with the conduct of a proposed activity or facility and consider the effectiveness of preventative measures and strategies in reducing the effects of such hazards.

The licensee shall establish and maintain a process to periodically review and revise existing risk assessments to ensure, at a minimum of every 5 years, new risks and lessons learned are incorporated into an updated safety analysis report. This report shall be provided to CNSC staff for review.

Guidance:

The licensee should establish and maintain 1 or more safety committees at the facility to periodically assess safety issues related to the operation and modification of the facility. These committees should have among their membership the necessary breadth of knowledge and experience to conduct these assessments. The results of these assessments should feed into the safety analysis report.

Guidance Documents

Document Number	Document Title	Version
IAEA SSR-4	Safety of Nuclear Fuel Cycle Facilities	2017

SCA – PHYSICAL DESIGN

Licence Condition 5.1: Design Program

The licensee shall implement and maintain a design program.

Preamble:

The [*Class I Nuclear Facilities Regulations*](#) require that a licence application contain the proposed measures, policies, methods and procedures to maintain the nuclear facility. The [*Class I Nuclear Facilities Regulations*](#) require that a licence application contain a description of the structures, systems and equipment, including the relevant design information for the facility.

A design program ensures that the design of the facility is managed using a well-defined systematic approach. This LC requires that the licensee implement and maintain a design program to confirm that safety-related systems, structures and components (SSC) and any modifications to them continue to meet their design basis given new information arising over time and taking changes in the external environment into account. It also confirms that SSCs continue to be able to perform their safety functions.

This LC requires that the licensee implement and maintain a design control process to ensure that design outputs (both interim and final) are reviewed, verified and validated against the design inputs and performance requirements, and to ensure that the design inputs are selected such that safety, performance and dependability of the design item are achieved.

CSA N393, *Fire Protection for Facilities that Process, Handle, or Store Nuclear Substances* provides the minimum fire protection requirements for the design, construction, commissioning, operation, and decommissioning of facilities which process, handle, or store nuclear substances, and other hazardous substances that directly relate to the nuclear substances being regulated.

The *National Fire Code of Canada 2015* sets out technical provisions regulating:

- (a) activities related to the construction, use or demolition of buildings and facilities;
- (b) the condition of specific elements of buildings and facilities;
- (c) the design or construction of specific elements of facilities related to certain hazards; and
- (d) protection measures for the current or intended use of buildings.

The *National Building Code of Canada 2015* sets out technical provisions for the design and construction of new buildings. It also applies to the alteration, change of use and demolition of existing buildings.

Compliance Verification Criteria:

Licensing Basis Publications

Document Number	Document Title	Version	Implementation Date
NRCC 56190	National Building Code of Canada 2015	2015	Implemented
NFCC 56192	National Fire Code of Canada 2015	2015	Implemented
CSA N393	Fire Protection for Facilities that Process, Handle or Store Nuclear Substances	2013 (R2018)	Implemented

Guidance:

Guidance Documents

Document Number	Document Title	Version
REGDOC-2.5.1	General Design Considerations: Human Factors	2019

SCA – FITNESS FOR SERVICE

Licence Condition 6.1: Fitness for Service Program

The licensee shall implement and maintain a fitness for service program.

Preamble:

The [Class I Nuclear Facilities Regulations](#) requires that a licence application contain information including the proposed measures, policies, methods and procedures for operating and maintaining the nuclear facility. It is expected that the licensee will conduct routine maintenance, inspection and testing to ensure that the availability, reliability and effectiveness of facilities and equipment that may impact the health, safety and protection of the environment.

Compliance Verification Criteria:

Licensing Basis Publications

Document Number	Document Title	Version	Implementation Date
NFCC 56192	National Fire Code of Canada	2015	Implemented
CSA N393	Fire Protection for Facilities that Process, Handle or Store Nuclear Substances	2013 (R2018)	Implemented

Licence Documents that Require Notification of Change

Document Number	Document Title	Notification
N/A	Maintenance Program	NT

The maintenance program shall include testing and inspection and shall be performed in such a manner that the availability, reliability, and effectiveness of the facility remain consistent with the design and safety analysis documents submitted in support of the licence application.

The program shall document the frequency that the various maintenance, inspection, and testing are performed.

Guidance:

None provided.

SCA – RADIATION PROTECTION

Licence Condition 7.1: Radiation Protection Program

The licensee shall implement and maintain a radiation protection program, which includes a set of action levels. When the licensee becomes aware that an action level has been reached, the licensee shall notify the Commission within seven days.

Preamble:

The [Radiation Protection Regulations](#) requires that the licensee implement a radiation protection program and also ascertain and record doses for each person who performs any duties in connection with any activity that is authorized pursuant to the [Nuclear Safety and Control Act](#) or is present at a place where that activity is carried on. This program must ensure that doses to workers do not exceed prescribed dose limits and are kept as low as reasonably achievable (ALARA), social and economic factors being taken into account.

The regulatory dose limits are explicitly provided in the [Radiation Protection Regulations](#).

Action levels (ALs) are designed to alert licensees before regulatory dose limits are reached. By definition, if an action level is reached, a loss of control of some part of the associated radiation protection program may have occurred, and specific action is required, as defined in the [Radiation Protection Regulations](#). ALs are not intended to be static and are to reflect operating conditions in the facility.

Compliance Verification Criteria:

Licensing Basis Publication

Document Number	Document Title	Version	Implementation Date
REGDOC-3.1.2	Reporting Requirements, Volume I: Non-Power Reactor Class I Facilities and Uranium Mines and Mills	2018	Implemented

Licence Documents that Require Notification of Change

Document Number	Document Title	Notification
N/A	Radiation Safety Program	PN
N/A	Licence Limits, Action Levels and Administrative Limits	PN

ALs for radiation protection are shown in the table below. In the event of a discrepancy between the tables and the licensee documentation upon which they are based, the licensee documentation shall be considered the authoritative source considering that the licensee has followed its own change control process.

Radiation Protection Action Levels

Parameter	Action Level
Effective Dose to Worker	1.0 mSv / quarter
	3.0 mSv / year
	10 mSv / 5 year period
Effective Dose to Pregnant Worker	0.5 mSv for balance of pregnancy
Bioassay Result	1,000 Bq/ml for any sampling period

Following the exceedance of an action level the licensee shall file a final report to the Commission as found in the licensee’s document “*Regulatory Reporting Program*”.

The licensee shall review and, if necessary, revise the ALs specified above at least once every 5 years in order to validate their effectiveness. The results of such reviews shall be provided to CNSC staff.

Guidance:

Guidance Documents

Document Number	Document Title	Version
REGDOC-2.7.1	Radiation Protection	2021
REGDOC-2.7.2	Dosimetry, Volume I: Ascertaining Occupational Dose	2021

SCA – CONVENTIONAL HEALTH AND SAFETY

Licence Condition 8.1: Conventional Health and Safety Program

The licensee shall implement and maintain a conventional health and safety program.

Preamble:

The [Class I Nuclear Facilities Regulations](#) requires that a licence application contain information including the proposed worker health and safety policies and procedures. As a federally regulated site, the SRBT facility is also subject to the requirements of Part II of the [Canada Labour Code](#) and [Canada Occupational Health and Safety Regulations](#).

Compliance Verification Criteria:

Licence Documents that Require Notification of Change

Document Number	Document Title	Notification
N/A	Health and Safety Policy	PN
N/A	Hazard Prevention Program	PN

Employment and Social Development Canada is mandated with overseeing and enforcing compliance with the [Canada Labour Code](#) and its underlying regulations. CNSC staff monitor licensee compliance with its conventional health and safety program, and will take regulatory actions for any potential unsafe work practice situations.

Guidance:

Guidance Documents

Document Number	Document Title	Version
REGDOC-2.8.1	Conventional Health and Safety	2019

SCA – ENVIRONMENTAL PROTECTION

Licence Condition 9.1: Environmental Protection Program

The licensee shall implement and maintain an environmental protection program, which includes a set of action levels. When the licensee becomes aware that an action level has been reached, the licensee shall notify the Commission within seven days.

Preamble:

The [*Class I Nuclear Facilities Regulations*](#) require that a licence application contain the proposed environmental protection policies, procedures, effluent and environmental monitoring programs. The [*General Nuclear Safety and Control Regulations*](#) require that every licensee take all reasonable precautions to protect the environment and the health and safety of persons and to maintain the security of nuclear facilities and of nuclear substances. The [*Radiation Protection Regulations*](#) prescribe the radiation dose limits for the general public of 1 mSv per calendar year.

The release of hazardous substances is regulated by the CNSC as well as both the Ontario Ministry of the Environment, Conservation, and Parks and Environment and Climate Change Canada through various acts and regulations.

CSA N288.1, *Guidelines for Calculating Derived Release Limits for Radioactive Material in Airborne and Liquid Effluents for Normal Operation of Nuclear Facilities*, provides guidelines for calculating derived release limits for radioactive material in airborne and liquid effluents for normal operation of nuclear facilities.

CSA N288.4, *Environmental Monitoring Programs at Class I Nuclear Facilities and Uranium Mines and Mills*, provides requirements for the design and implementation of an environmental monitoring program at nuclear facilities.

CSA N288.5, *Effluent Monitoring Programs at Class I Nuclear Facilities and Uranium Mines and Mills*, provides requirements for the design and implementation of an effluent monitoring program at nuclear facilities.

CSA N288.6, *Environmental Risk Assessments at Class I Nuclear Facilities and Uranium Mines and Mills*, provides requirements for the performance and maintenance of an environmental risk assessment at nuclear facilities.

CSA N288.7, *Groundwater Protection Programs at Class I Nuclear Facilities and Uranium Mines and Mills* provides requirements and guidance, which facilitate groundwater protection at nuclear facilities.

CSA N288.8, *Establishing and Implementing Action Levels for Releases to the Environment from Nuclear Facilities*, provides requirements for establishing and implementing action levels at nuclear facilities.

Compliance Verification Criteria:

Licensing Basis Publications

Document Number	Document Title	Version	Implementation Date
CSA N288.1	Guidelines for Calculating Derived Release Limits for Radioactive Material in Airborne and Liquid Effluents for Normal Operation of Nuclear Facilities	2014 (R2019)	Implemented
CSA N288.4	Environmental Monitoring Programs at Class I Nuclear Facilities and Uranium Mines and Mills	2010 (R2015)	Implemented
CSA N288.5	Effluent Monitoring Programs at Class I Nuclear Facilities and Uranium Mines and Mills	2011 (R2016)	Implemented
CSA N288.6	Environmental Risk Assessments at Class I Nuclear Facilities and Uranium Mines and Mills	2012 (R2017)	Implemented
CSA N288.7	Groundwater Protection Programs at Class I Nuclear Facilities and Uranium Mines And Mills	2015	Implemented
CSA N288.8	Establishing And Implementing Action Levels for Releases to the Environment From Nuclear Facilities	2017	Implemented
REGDOC-3.1.2	Reporting Requirements, Volume I: Non-Power Reactor Class I Facilities and Uranium Mines and Mills	2018	Implemented
REGDOC-2.9.1	Environmental Protection: Environmental Principles, Assessments and Protection Measures, Version 1.2	2020	Implemented

Licence Documents that Require Notification of Change

Document Number	Document Title	Notification
N/A	Environmental Protection Program	PN
N/A	Environmental Management System	PN
N/A	Environmental Monitoring Program	PN
N/A	Effluent Monitoring Program	PN
N/A	Groundwater Protection Program	PN
N/A	Groundwater Monitoring Program	PN
N/A	Derived Release Limits	PN
N/A	Environmental Risk Assessment	PN
N/A	Licence Limits, Action Levels and Administrative Limits	PN

The licensee shall review and revise the ERA in accordance with CSA N288.6. The results of such reviews shall be provided to CNSC staff.

The licensee's environmental protection program shall ensure control, monitoring and recording of environmental emissions from the SRBT such that the releases do not exceed licence limits as defined below.

Licence Limits – Air Releases

Nuclear Substances and Form	Limits (Bq/year)
Tritium as Tritium Oxide	6.72 E + 13
Total Tritium as Tritium Oxide and Tritium Gas	4.48E+ 14

Licence Limits – Sewer Releases

Nuclear Substance and Form	Limits (Bq/year)
Tritium-Water Soluble	2.0E+11

Action Levels – Air Releases

NUCLEAR SUBSTANCE AND FORM	WEEKLY ACTION LEVEL (GBq)
Tritium as tritium oxide (HTO)	840
Total tritium as tritium oxide (HTO) and tritium gas (HT)	7,753

REAL-TIME STACK MONITORING MEASUREMENT
$\geq 0.74 \text{ GBq/m}^3$ for a duration of ten minutes*

* Equivalent to $\geq 20,000 \text{ } \mu\text{Ci/m}^3$ for a duration of ten minutes

Action Levels – Sewer Releases

NUCLEAR SUBSTANCE AND FORM	DAILY ACTION LEVEL (GBq)
Tritium water soluble	0.15

Following the exceedance of an action level the licensee shall file a final report to the Commission as found in the licensee’s document “*Regulatory Reporting Program*”.

The licensee shall review and, if necessary, revise the action levels specified above at least once every 5 years in order to validate their effectiveness. The results of such reviews shall be provided to CNSC staff.

Guidance:

None provided.

SCA – EMERGENCY MANAGEMENT AND FIRE PROTECTION

Licence Condition 10.1: Emergency Preparedness Program

The licensee shall implement and maintain an emergency preparedness program.

Preamble:

The [Class I Nuclear Facilities Regulations](#) requires that an application for a licence to operate a Class I nuclear facility include the proposed measures to prevent or mitigate the effects of accidental releases of nuclear substances and hazardous substances on the environment, the health and safety of persons and the maintenance of national security, including measures to assist, notify, report to off-site authorities including the testing of the implementation of these measures.

This LC requires the licensee to establish an emergency preparedness program to prepare for, to respond to, and to recover from the effects of accidental radiological/nuclear and/or hazardous substance release. As part of the emergency preparedness program, the licensee shall prepare an onsite emergency plan and establish the necessary organizational structure for clear allocation of responsibilities, authorities, and arrangements for coordinating onsite activities and cooperating with external response organizations throughout all phases of an emergency.

Compliance Verification Criteria:

Licensing Basis Publication

Document Number	Document Title	Version	Implementation Date
REGDOC-2.10.1	Nuclear Emergency Preparedness and Response, Version 2	2016	Implemented

Licence Documents that Require Notification of Change

Document Number	Document Title	Notification
N/A	Emergency Plan	PN

Guidance:

None provided.

Licence Condition 10.2: Fire Protection Program

The licensee shall implement and maintain a fire protection program.

Preamble:

Licensees require a comprehensive fire protection program (the set of planned, coordinated, controlled and documented activities) to ensure the licensed activities do not result in an unreasonable risk to the health and safety of persons and to the environment due to fire and to ensure that the licensee is able to efficiently and effectively respond to emergency fire situations.

Compliance Verification Criteria:

Licensing Basis Publications

Document Number	Document Title	Version	Implementation Date
NFCC 56192	National Fire Code of Canada 2015	2015	Implemented
NRCC 56190	National Building Code of Canada 2015	2015	Implemented
CSA N393	Fire Protection for Facilities That Process, Handle, or Store Nuclear Substances	2013 (R2018)	Implemented

Licencee Documents that Require Notification of Change

Document Number	Document Title	Notification
N/A	Fire Safety Plan	PN
N/A	Fire Protection Program	PN

Guidance:

None provided.

SCA – WASTE MANAGEMENT

Licence Condition 11.1: Waste Management Program

The licensee shall implement and maintain a waste management program.

Preamble:

The “waste management” safety and control area covers internal waste-related programs that form part of the facility’s operations up to the point where the waste is removed from the facility to a separate waste management facility. This area also covers the planning for decommissioning.

CNSC Regulatory Document REGDOC-2.11, [Framework for Radioactive Waste Management and Decommissioning in Canada](#), describes the national framework and philosophy underlying the CNSC’s approach to regulating the management of radioactive waste.

CNSC Regulatory Document REGDOC-2.11.1, [Waste Management, Volume I: Management of Radioactive Waste](#) defines radioactive waste as any material (liquid, gaseous, or solid) that contains a radioactive nuclear substance, as defined in section 2 of the NSCA, for which no further use is foreseen. In addition to containing nuclear substances, radioactive waste may also contain hazardous substances that are not radioactive, as defined in section 1 of the *General Nuclear Safety and Control Regulations*.

Compliance Verification Criteria:

Licensing Basis Publications

Document Number	Document Title	Version	Implementation Date
CSA N292.0-14	General Principles for the Management of Radioactive Waste and Irradiated Fuel	2014	Implemented
CSA N292.0-19	General Principles for the Management of Radioactive Waste and Irradiated Fuel	2019	December 2022
CSA N292.3-14	Management of Low- and Intermediate-Level Radioactive Waste	2014	Implemented
CSA N292.8-21	Characterization of radioactive waste and irradiated fuel	2021	December 2022
REGDOC-2.11.1	Waste Management, Volume I: Management of Radioactive Waste	2021	December 2022

Licensee Documents that Require Notification of Change

Document Number	Document Title	Notification
N/A	Waste Management Program	PN

Transition

The licensee shall perform a gap analysis and submit an implementation plan for the following documents by September 30, 2022:

- CSA N292.0-19, *General Principles for the Management of Radioactive Waste and Irradiated Fuel*
- CSA N292.8-21, *Characterization of radioactive waste and irradiated fuel*
- REGDOC-2.11, *Framework for Radioactive Waste Management and Decommissioning In Canada*
- REGDOC-2.11.1, *Waste Management, Volume I: Management of Radioactive Waste*

Guidance:

Guidance Documents

Document Number	Document Title	Version
CSA N292.5	Guideline for the exemption or clearance from regulatory control of materials that contain, or potentially contain, nuclear substances	2021

Licence Condition 11.2: Decommissioning Plan

The licensee shall maintain a decommissioning plan.

Preamble:

The “waste management” safety and control area covers internal waste-related programs that form part of the facility’s operations up to the point where the waste is removed from the facility to a separate waste management facility. This area also covers the planning for decommissioning.

CNSC Regulatory Document REGDOC-2.11, [Framework for Radioactive Waste Management and Decommissioning in Canada](#), describes the national framework and philosophy underlying the CNSC’s approach to regulating decommissioning.

CNSC Regulatory Document REGDOC-2.11.2, [Decommissioning](#) defines decommissioning as the administrative and technical actions taken to allow the removal of some or all of the regulatory controls from a facility, location or site where nuclear substances are managed, used, possessed or stored. Decommissioning actions are the procedures, processes and work activities (e.g., storage with surveillance, decontamination, dismantling or cleanup) that are taken to retire a facility, location or site from service with due regard for the health and safety of people and the environment.

Compliance Verification Criteria:

Licensing Basis Publication

Document Number	Document Title	Version	Implementation Date
CSA N294-09	Decommissioning of Facilities Containing Nuclear Substances	2009 (R2014)	Implemented
CSA N294-19	Decommissioning of Facilities Containing Nuclear Substances	2019	November 2024
REGDOC-2.11.2	Decommissioning	2021	November 2024

The planning for decommissioning of the SRBT facility is documented in the SRBT Preliminary Decommissioning Plan (PDP) and the associated cost estimate. The licensee shall revise the PDP at a minimum every 5 years, or if there are any changes to the facility operations or design that affect the estimated cost of decommissioning. When the PDP is revised, the cost of decommissioning shall be reviewed.

Licensee Documents that Require Notification of Change

Document Number	Document Title	Notification
N/A	Preliminary Decommissioning Plan – SRBT (November 29, 2019)	PN

Guidance:

None provided.

SCA – SECURITY

Licence Condition 12.1: Security Program

The licensee shall implement and maintain a security program.

Preamble:

The [General Nuclear Safety and Control Regulations](#) requires that a licence application contain information including the proposed measures to control access to the site of the activity to be licensed and the nuclear substance, prescribed equipment or prescribed information.

The [Class I Nuclear Facilities Regulations](#) requires that a licence application to operate a Class I nuclear facility contain information including the proposed measures to prevent acts of sabotage or attempted sabotage at the nuclear facility, including measures to alert the licensee to such acts.

Part 2 of the [Nuclear Security Regulations](#) also applies to this licensee, as it is listed in Schedule 2 of these regulations. Part 2 of the *Nuclear Security Regulations* requires that an application in respect of a nuclear facility listed in Schedule 2 contain a description of the physical protection measures to be undertaken to ensure compliance with Part 2.

Compliance Verification Criteria:

Licensee Documents that Require Notification of Change

Document Number	Document Title	Notification
N/A	Facility Security Program	PN

The licensee shall implement and maintain a facility security plan, and ensure it is designated as prescribed information. The facility security plan shall be reviewed by the licensee at least once a year and be updated based on any changes to the facility operational security measures or to address any changes within the licensed facility that may impact on facility security.

Guidance:

Guidance Documents

Document Number	Document Title	Version
REGDOC-2.12.3	Security of Nuclear Substances: Sealed Sources and Category I, II and III Nuclear Material, Version 2.1	2020

SCA – PACKAGING AND TRANSPORT

Licence Condition 13.1: Packaging and Transport Program

The licensee shall implement and maintain a packaging and transport program.

Preamble:

The [Class I Nuclear Facilities Regulations](#) requires that a licence application contain information on the proposed procedures for transporting nuclear substances and hazardous substances.

The transport of nuclear substances or hazardous substances shall be done in accordance with the requirements of the [Packaging and Transport of Nuclear Substances Regulations, 2015](#), (PTNSR) and [Transportation of Dangerous Goods Regulations](#) (TDGR) set out by Transport Canada.

Compliance Verification Criteria:

Licence Documents that Require Notification of Change

Document Number	Document Title	Notification
SHP-001	Packaging and Shipping – General Requirements	NT

The licensee shall implement and maintain a packaging and transport program that will be in compliance with all the regulatory requirements set out in the PTNSR and in the TDGR.

Every person who transports or causes to be transported nuclear substances (included in Class 7 of the Schedule to the [Transportation of Dangerous Goods Act](#)) shall act in accordance with the requirements of the TDGR set out by Transport Canada.

The PTNSR provides specific requirements for the design of transport packages, the packaging, marking and labeling of packages and the handling and transport of nuclear substances.

Guidance:

None provided.

APPENDIX A – DEFINITIONS AND ACRONYMS

1. Definitions

The following is a list of definitions of words or expressions used in the LCH that may need clarification; they are defined for the purpose of the LCH only. All other terms and expressions used in the LCH are consistent with the definitions provided in the NSCA, the regulations made pursuant to the NSCA, or in the CNSC regulatory document [REGDOC-3.6, Glossary of CNSC Terminology](#).

Accept/ed/able/ance – meets regulatory requirements, which mean it is in compliance with the documents referenced in the LCH.

Approval – Commission’s permission to proceed, for situations or changes where the licensee would be:

- (a) Not compliant with a regulatory requirements set out in applicable laws and regulations;
- (b) not compliant with a licence condition; and
- (c) not in the safe direction but the objective of the licensing basis is met.

Boundary Conditions – procedural, administrative rules and operating limits for ensuring safe operation of the facility based on safety analyses and any applicable regulatory requirements.

Compliance Verification Criteria – regulatory criteria used by CNSC staff to verify compliance with the licence conditions.

Design Basis – the entire range of conditions for which the nuclear facility is designed, in accordance with established design criteria, and for which damage to the fuel and/or the release of radioactive material is kept within authorized limits.

Guidance – non-mandatory information on how the licensee may comply with a LC.

Implementation Date – the date that a given document is implemented by the licensee. If the licensee implements the document before or at the issuance of the licence then “implemented” will be stated.

Notification Document – a document which is submitted to the CNSC at the time of implementing the change.

Prior Notification Document – a document which is submitted to the CNSC prior to implementing the change.

Program(s) – a documented group of planned activities, procedures, processes, standards and instructions coordinated to meet a specific purpose.

Qualified Staff – trained licensee staff, deemed competent and qualified to carry out tasks associated with their respective positions.

Safe Direction – changes in facility safety levels that would not result in:

- (a) a reduction in safety margins;
- (b) a breakdown of barrier;
- (c) an increase (in certain parameters) above accepted limits;
- (d) an increase in risk;
- (e) impairment(s) of safety systems;
- (f) an increase in the risk of radioactive releases or spills of hazardous substances;
- (g) injuries to workers or members of the public;
- (h) introduction of a new hazard;
- (i) reduction of the defence-in-depth provisions; or
- (j) causing hazards or risks different in nature or greater in probability or magnitude than those stated in the safety analysis of the nuclear facility.

Safety and Control Measures – measures or provisions which demonstrate that the applicant:

- (a) Is qualified to carry on the licensed activities; and
- (b) has made adequate provision for the protection of the environment, the health and safety of persons, the maintenance of national security and any measures required to implement international obligations to which Canada has agreed.

Written Notification – a physical or electronic communication between CNSC staff and a person authorized to act on behalf of the licensee

2. Acronyms List

Acronym	Definition
ALARA	As Low As Reasonably Achievable
AL	Action Level
Bq	Becquerel
CNSC	Canadian Nuclear Safety Commission
CSA	Canadian Standards Association (now CSA Group)
CVC	Compliance Verification Criteria
GBq	Gigabecquerel
GNSCR	<i>General Nuclear Safety and Control Regulations</i>
HT	Tritium gas
HTO	Tritium Oxide
IAEA	International Atomic Energy Agency
LC	Licence Condition
LCH	Licence Conditions Handbook
m ³	Cubic metre
mSv	Millisievert
N/A	Not Applicable
NEW	Nuclear Energy Worker
NPFD	Nuclear Processing Facilities Division
NSCA	<i>Nuclear Safety and Control Act</i>
NSPFL	Nuclear Substance Processing Facility Licence
NSPFOL	Nuclear Substance Processing Facility Operating Licence
NT	Notification
OLC	Operating Limits and Conditions
PDP	Preliminary Decommissioning Plan
PN	Prior Notification
PTNSR	<i>Packaging and Transport of Nuclear Substances Regulations</i>
SCA	Safety and Control Area
SRBT	SRB Technologies (Canada) Inc.
SSCs	Systems, Structures and Components
TDGR	Transportation of Dangerous Goods Regulations

APPENDIX B – LIST OF VERSION CONTROLLED DOCUMENTS

1. Codes, Standards and Regulatory Documents

Document Number	Document Title	Revision
CSA N286	Management Systems Requirements for Nuclear Facilities	2012 (R2017)
CSA N286.0.1	Commentary on N286-12, Management Systems Requirements for Nuclear Facilities	2021
CSA N288.1	Guidelines for Calculating Derived Release Limits for Radioactive Material in Airborne and Liquid Effluents for Normal Operation of Nuclear Facilities	2014 (R2019)
CSA N288.4	Environmental Monitoring Programs at Class I Nuclear Facilities and Uranium Mines and Mills	2010 (R2015)
CSA N288.5	Effluent Monitoring Programs at Class I Nuclear Facilities and Uranium Mines and Mills	2011 (R2016)
CSA N288.6	Environmental Risk Assessments at Class I Nuclear Facilities and Uranium Mines and Mills	2012 (R2017)
CSA N288.7	Groundwater Protection Programs at Class I Nuclear Facilities and Uranium Mines and Mills	2015
CSA N288.8	Establishing and Implementing Action Levels for Releases to the Environment from Nuclear Facilities	2017
CSA N292.0	General Principles for the Management of Radioactive Waste and Irradiated Fuel	2014
CSA N292.3	Management of Low- and Intermediate-Level Radioactive Waste	2014
CSA N292.5	Guideline for the exemption or clearance from regulatory control of materials that contain, or potentially contain, nuclear substances	2021
CSA N292.8	Characterization of Radioactive Waste and Irradiated Fuel	2021

APPENDIX B – LIST OF VERSION CONTROLLED DOCUMENTS

Document Number	Document Title	Revision
CSA N294	Decommissioning of Facilities Containing Nuclear Substances	2009 (R2014)
CSA N393	Fire Protection for Facilities that Process, Handle, or Store Nuclear Substances	2013 (R2018)
IAEA SSR-4	Safety of Nuclear Fuel Cycle Facilities	2017
NRCC 56190	National Building Code of Canada 2015	2015
NRCC 56192	National Fire Code of Canada 2015	2015
REGDOC-2.1.1	Management System	2019
REGDOC-2.1.2	Safety Culture	2018
REGDOC-2.2.2	Personnel Training, Version 2	2016
REGDOC-2.2.5	Minimum Staff Complement	2019
REGDOC-2.5.1	General Design Considerations: Human Factors	2019
REGDOC-2.7.1	Radiation Protection	2021
REGDOC-2.7.2	Dosimetry, Volume I: Ascertaining Occupational Dose	2021
REGDOC-2.8.1	Conventional Health and Safety	2019
REGDOC-2.9.1	Environmental Protection: Environmental Principles, Assessments and Protection Measures, Version 1.2	2020
REGDOC-2.10.1	Nuclear Emergency Preparedness and Response, Version 2	2016
REGDOC-2.12.3	Security of Nuclear Substances: Sealed Sources and Category I, II and III Nuclear Material, Version 2.1	2020
REGDOC-3.1.2	Reporting Requirements, Volume I: Non-Power Reactor Class I Nuclear Facilities and Uranium Mines and Mills	2018
REGDOC-3.2.1	Public Information and Disclosure	2018
REGDOC-3.5.3	Regulatory Fundamentals	2018
REGDOC-3.6	Glossary of CNSC Terminology	2016

APPENDIX B – LIST OF VERSION CONTROLLED DOCUMENTS

2. Licensee Documents

Document Number	Document Title	Notification
N/A	Derived Release Limits	PN
N/A	Effluent Monitoring Program	PN
N/A	Emergency Plan	PN
N/A	Environmental Management System	PN
N/A	Environmental Monitoring Program	PN
N/A	Environmental Protection Program	PN
N/A	Environmental Risk Assessment	PN
N/A	Facility Security Program	PN
N/A	Fire Hazard Assessment	PN
N/A	Fire Protection Program	PN
N/A	Fire Safety Plan	PN
N/A	Groundwater Monitoring Program	PN
N/A	Groundwater Protection Program	PN
N/A	Hazard Prevention Program	PN
N/A	Health and Safety Policy	PN
N/A	Licence Limits, Action Levels and Administrative Limits	PN
N/A	Maintenance Program	NT
N/A	Preliminary Decommissioning Plan – SRBT (November 29, 2019)	PN
N/A	Public Information Program	NT
N/A	Quality Manual	PN
N/A	Radiation Safety Program	PN

APPENDIX B – LIST OF VERSION CONTROLLED DOCUMENTS

Document Number	Document Title	Notification
N/A	Regulatory Reporting Program	PN
N/A	Safety Analysis Report	PN
N/A	SRBT Training Program Manual	NT
N/A	Waste Management Program	PN
RSO-009	Tritium Inventory Management	NT
RSO-029	Nuclear Substances Inventory Management	NT
SHP-001	Packaging and Shipping – General Requirements	NT

APPENDIX B – LIST OF VERSION CONTROLLED DOCUMENTS