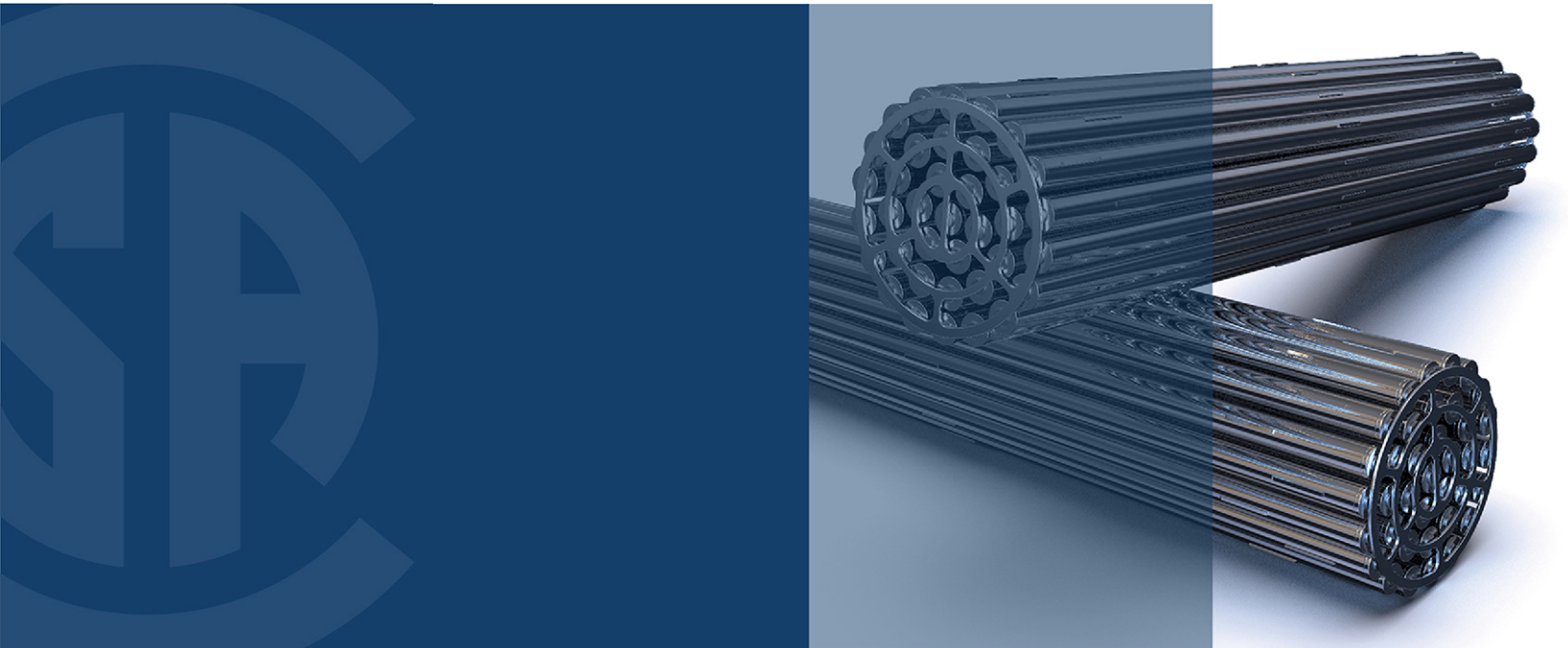


Environmental management of nuclear facilities: Common requirements of the CSA N288 series of Standards



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Preface

This is the first edition of CSA N288.0, *Environmental management of nuclear facilities: Common requirements of the CSA N288 series of Standards*.

This Standard is part of the N288 series of Standards and Guidelines on environmental management for nuclear facilities. The CSA N-Series Standards provide an interlinked set of requirements for the management of nuclear facilities and activities. This Standard captures the common elements of the CSA N288 series of Standards for the purposes of minimizing duplication of requirements within the series. Integration of CSA N288.0 will optimize the implementation of the series as well as facilitate optimal maintenance of the series as a whole.

CSA N286 provides overall direction to management to develop and implement sound management practices and controls, while the other CSA Group nuclear Standards provide technical requirements and guidance that support the management system. This Standard works in harmony with CSA N286 and does not duplicate the generic requirements of CSA N286; however, it can provide more specific direction for those requirements.

Users of this Standard are reminded that the design, manufacture, construction, commissioning, operation, and decommissioning of nuclear facilities in Canada are subject to the provisions of the *Nuclear Safety and Control Act* and its supporting Regulations.

This Standard was prepared by the Subcommittee on General Requirements for the Environmental Management of Nuclear Facilities, under the jurisdiction of the Technical Committee on Environmental Management for Nuclear Facilities and the Strategic Steering Committee, and has been formally approved by the Technical Committee.

Notes:

- 1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
- 2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
- 3) *This Standard was developed by consensus, which is defined by CSA Policy governing standardization — Code of good practice for standardization as “substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity”. It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.*
- 4) *To submit a request for interpretation of this Standard, please send the following information to inquiries@csagroup.org and include “Request for interpretation” in the subject line:*
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 - b) *provide an explanation of circumstances surrounding the actual field condition; and*
 - c) *where possible, phrase the request in such a way that a specific “yes” or “no” answer will address the issue.*

Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are available on the Current Standards Activities page at standardsactivities.csa.ca.
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 - c) *wording of the proposed change; and*
 - d) *rationale for the change.*

CSA N288.0:22

Environmental management of nuclear facilities: Common requirements of the CSA N288 series of Standards

0 Introduction

0.1 Purpose

The purpose of the nuclear environmental management Standards, CSA N288 series of Standards, is to provide a framework for environmental protection associated with nuclear facilities. The Standards include elements of environmental protection such as modelling, pathways analysis, dose assessment, monitoring equipment performance, emissions, effluent, environmental and groundwater monitoring, and risk assessment. The Standards address nuclear and hazardous substances and physical stressors in airborne emissions and waterborne effluents, fugitive emissions, and other physical impacts on biota over the life cycle of the nuclear facility. The operational phase of the life cycle includes normal operation as well as anticipated operational occurrences (AOO); it does not include acute risks associated from releases under accident scenarios, with the exception of CSA N288.2.

The CSA N288 series of Standards are developed for implementation at nuclear facilities including, but not limited to power production reactors, uranium mines and mills, research facilities, and processing and fuel fabrication. The application of a Standard is defined within each Standard. Dependent on the specific requirements of each type of nuclear facility, all of the Standards or a subset of the Standards might be applicable to that facility type. For example, of the current Standards within the series, ten Standards apply to power production reactors while eight Standards apply to uranium mines and mills. Each Standard has been developed to support one or more of the key elements of a nuclear facility's overall environmental protection program.

The purpose of this Standard is to create an umbrella Standard for the CSA N288 series of Standards that consolidates the requirements for the common program elements under an environmental management system (EMS) and eliminates conflicts and inconsistencies. This Standard will provide efficiencies in the implementation of the CSA N288 series of Standards, as well as allow the individual Standards to become more concise. Users of this Standard can design and implement common elements (i.e., training) for the whole EMS, as they pertain to EMS sub-programs under the various Standards of the CSA N288 series of Standards.

0.2 CSA N288 series of Standards

The CSA N288 series of Standards includes the following:

- a) CSA N288.0, *Environmental Management of Nuclear Facilities: Common requirements of the CSA N288 series of Standards*;
- b) CSA N288.1, *Guidelines for modelling radionuclide environmental transport, fate, and exposure associated with the normal operation of nuclear facilities*;
- c) CSA N288.2, *Guidelines for calculating the radiological consequences to the public of a release of airborne radioactive material for nuclear reactor accident*;
- d) CSA N288.3.4, *Performance testing of nuclear air-cleaning systems at nuclear facilities*;