



CNSC POTASSIUM IODIDE (KI) PILL WORKING GROUP



Durham Nuclear Health Committee

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Overview



- Background
- Terms of Reference
- Phase I Report
- Engagement on Phase I Report
- Next Steps





BACKGROUND

Background

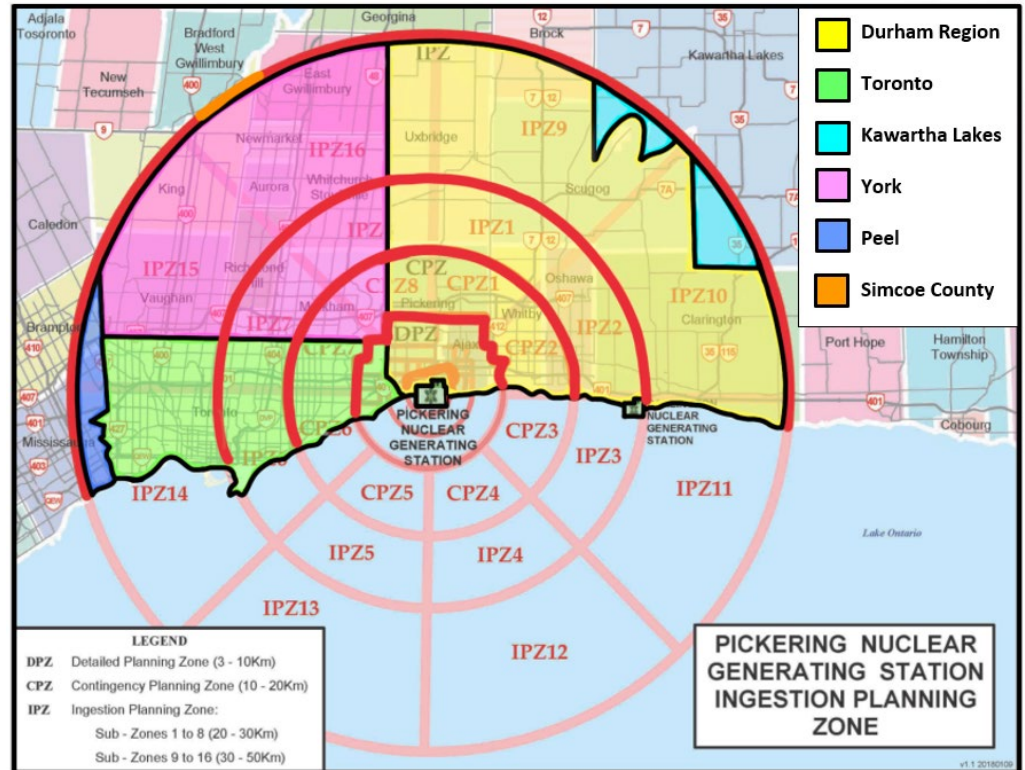
- CNSC Public Hearing on the Pickering licence renewal (June 2018)
 - Intervenors raised concerns on Potassium Iodide (KI) Pill pre-distribution and distribution in an emergency in the Ingestion Planning Zone (IPZ)
 - Commitment by CNSC staff to form a working group to provide clarity on the roles and responsibilities for KI Pill distribution
- Commission released Detailed Record of Decision for Pickering licence renewal in January 2019



Ingestion Planning Zone (IPZ)



Ingestion Planning Zone (IPZ)
for Pickering Nuclear
Generating Station, and
associated municipalities





TERMS OF REFERENCE

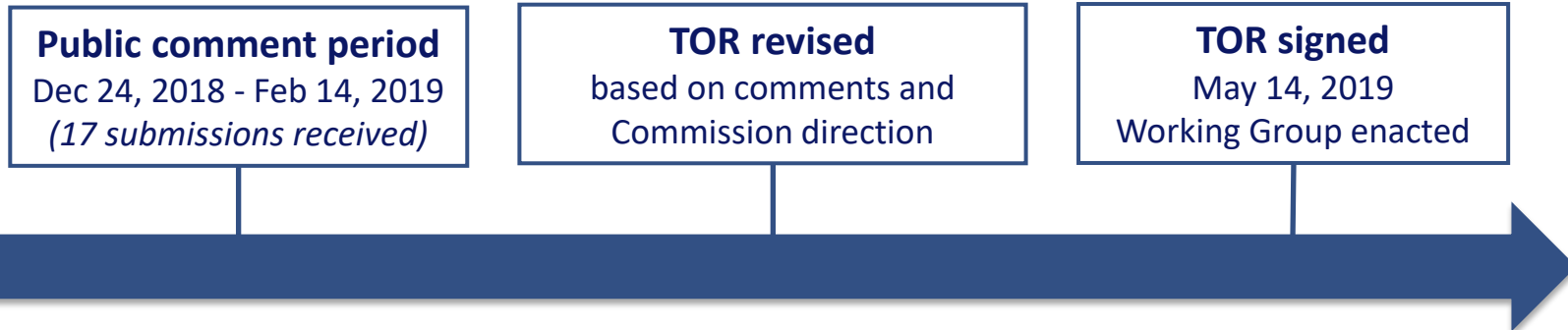
Terms of Reference



Draft Terms of Reference (TOR) prepared by:

- The CNSC
- Ontario Ministry of Health (MOH)
- Ontario Office of the Fire Marshal and Emergency Management (OFMEM)
- Ontario Power Generation (OPG)

The TOR establishes the membership, mandate, deliverables and conduct of the Working Group



Working Group Membership



Signatories to the TOR:



CNSC



MOH



OFMEM



OPG

The Working Group also includes Health Canada, as well as Public Health Units and Emergency Management Coordinators from the following municipalities:

- Peel Region
- York Region
- City of Toronto
- Peterborough County
- Simcoe County
- City of Kawartha Lakes
- Durham Region

Mandate



The mandate of the Working Group is to be completed in two phases:

Phase I

Fulfill the commitment to the Commission to provide clarity on the existing plans and associated responsible authorities for distributing KI pills in the IPZ in the event of an emergency at the Pickering NGS

Phase II

Fulfill the direction from the Commission in the detailed Record of Decision

- Determine feasibility of pre-distribution of KI pills to all schools within the IPZ
- Establish clear and detailed plans for the distribution of KI pills in the IPZ in the event of an emergency at Pickering

CNSC Website



A dedicated [webpage](#) for the Working Group was launched on June 14, 2019

- Background information
- TOR
- Project milestones
- Meeting Minutes
- CNSC Advisory Committee
- Quick facts on KI pills

Additional documentation is added on an ongoing basis

A screenshot of the Canadian Nuclear Safety Commission (CNSC) website. The page is titled "Potassium Iodide (KI) Pill Working Group". It features a navigation menu with categories like "The Commission", "Uranium", "Reactors", "Nuclear substances", "Waste", "Acts and regulations", and "Resources". The main content area includes a "Resources" sidebar with links to "Environmental reviews", "A-1-2", "Indigenous consultation, engagement and reconciliation", "CNSC Speaker Series", "Learning Portal", "Forms", "International cooperation", "Nuclear licenses across Canada", "New nuclear projects", "News Room", "Presentations", "Protocols", "Publications", "Radiation", and "Scientific and Technical Information". The main text describes the working group's purpose: "In 2019, the CNSC established a Potassium Iodide (KI) Pill Working Group and Advisory Committee to provide clarity on the existing plans and associated responsible authorities to distribute KI pills in the Ingestion Planning Zone (IPZ) in the event of an emergency at the Pickering Nuclear Generating Station (see figure 1)." Below the text is a map of the Pickering Nuclear Generating Station Ingestion Planning Zone, showing concentric red circles representing different planning zones (IPZ1, IPZ2, IPZ3) around the station. A caption below the map reads: "Figure 1. Pickering Nuclear Generating Station Ingestion Planning Zone". At the bottom of the page, there is a section titled "What is KI?" with a description: "In the event of a nuclear emergency, KI is effective in reducing the threat of thyroid cancer to residents at risk of inhaling or ingesting radioactive iodine. The CNSC established regulatory requirements for nuclear power plant licensees to ensure that KI pills are pre-distributed to everyone within 10 km of all power plants. Regional, municipal and provincial authorities responsible for emergency management, including the Province of Ontario's Office of the Fire Marshal & Emergency Management and the New Brunswick Emergency Management Organization, also facilitate the pre-distribution of KI pills."

Advisory Committee (1/2)



A commitment was made to the Commission in November 2018 to form an **Advisory Committee**

Purpose of the Advisory Committee

To provide independent advice to CNSC staff on the deliverables of the Working Group and input on topics discussed at the Phase I and Phase II workshops.

- CNSC staff considered all advice and input from the Committee
- Operating procedures were developed to clarify the purpose, membership, engagement opportunities and conduct of the Committee activities

Advisory Committee (2/2)



Membership

- Canadian Environmental Law Association
- Toronto District School Board
- Toronto Catholic District School Board
- Municipality of Kincardine
- Bruce Power
- McMaster University



PHASE I REPORT

Phase I Workshop



- Two-day Workshop held in November 2019 with all members present
- The objective of the Workshop was to gather the information necessary to achieve the mandate of Phase I
- Draft Phase I Report developed following the workshop
 - Concurrence on the report was delayed due to Covid-19
- Concurrence was achieved in December 2020

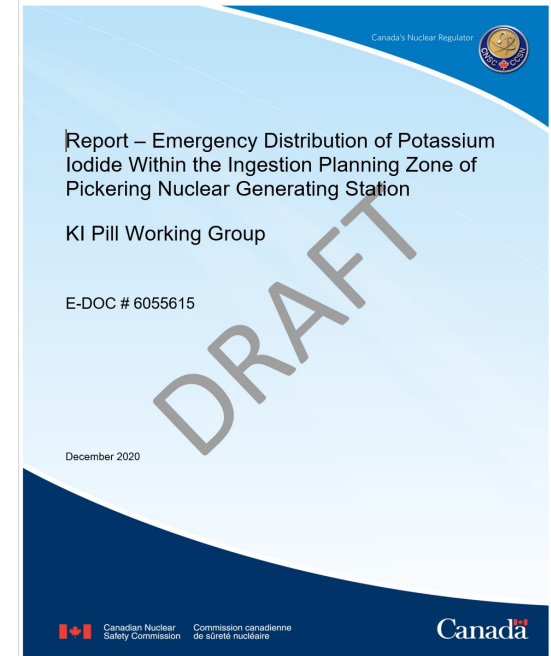


Phase I Report



The Phase I Report covers the following topics:

- Nuclear emergency management framework in Canada
- Information on KI pills and pre-distribution
- Current plans and associated roles and responsibilities for KI pill emergency distribution
- Public Resources Relating to KI
- Concept of Operations for KI Emergency Distribution



Phase I Report: Conclusion (1/2)



The Working Group made the following conclusions:

- Roles and responsibilities are clearly defined in current plans
 - The report provides clarity on the existing plans and associated responsible authorities for the emergency distribution of KI
- A flexible concept of operations exists for emergency distribution
- Public awareness and information campaigns are conducted but improvements have been identified

Phase I Report: Conclusion (2/2)



In addition to the mandate for Phase II, the Working Group identified the following topics for further consideration:

- Public awareness and education in designated and non-designated municipalities
- Pre-staging of the centralized stockpile to municipalities in the IPZ
- Development of a pre-existing emergency communications strategy for use by Municipalities and PHUs within the IPZ during an event

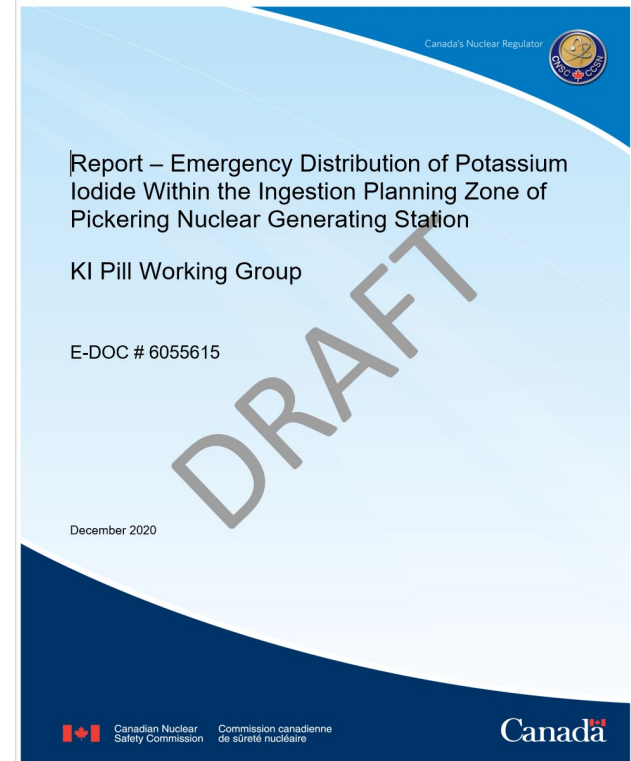


ENGAGEMENT ON PHASE I REPORT

Phase I Report Public Review



- The KI Pill Working Group's draft report was open for consultation from April 6 to July 5, 2021 through CNSC's e-consultation page (www.letstalknuclearsafety.ca)
- 16 comments received from 3 reviewers; key themes raised include:
 - Information on how new residents obtain KI pills
 - Clarification of definitions and terminology
 - Acknowledgement of Treaty Lands the PNGS resides on



Indigenous Engagement



- Notification letters sent to Indigenous Nations and communities in August 2019
 - Follow-up phone calls and meetings with interested communities
- Draft Phase I Report sent to Indigenous Nations and communities in April 2021
- Curve Lake First Nation submitted comments on the draft Phase I Report
 - Impacts to non-human species during an emergency
 - Communications to Indigenous communities during an emergency
 - Information, awareness and education related to KI pills for Indigenous communities
 - How Indigenous communities outside the IPZ obtain KI pills

Indigenous engagement is an important consideration in CNSC activities and ensures opportunities for input are provided

CNSC Advisory Committee Workshop (1/2)



An Advisory Committee Workshop was held November 19, 2021.

The objective of the workshop was to:

- Solicit comments on the Phase I Report
- Discuss comments received from the public review period
- Determine if the committee agreed that the report meets the mandate for Phase I

Members did not request specific changes to the Phase I Report.

Members provided valuable input on further topics for consideration as part of Phase II of the Working Group.

**Advisory
Committee
members at the
workshop
concluded that
the Phase I
Report meets
the mandate of
Phase I**

CNSC Advisory Committee Workshop (2/2)



Input on further topics for consideration as part of Phase II includes the following:

Information
on the actions taken
by municipalities
in support of
emergency
distribution of KI pills

**Need for an availability
of information**
and medical advice for
individuals who cannot take
KI pills, and how it differs
from other populations

Impact on timelines
and capabilities for
KI pill distribution from
a severe beyond design
basis accident



NEXT STEPS

Next Steps

- **Commission Proceeding** on Phase I Report (January 26, 2022)
- **The Phase I Report** will be finalized and published following the Commission Meeting and made available on the Working Group webpage
- The Working Group will commence **Phase II**
- A **Phase II Report** will be prepared by the Working Group and undergo public review and be presented to the Commission



Canadian Nuclear
Safety Commission

Commission canadienne
de sûreté nucléaire

Canada



Thank You! Questions?

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