



Canadian Nuclear
Safety Commission

Commission canadienne
de sûreté nucléaire

Canada

CNSC POTASSIUM IODIDE (KI) PILL WORKING GROUP



Durham Nuclear Health Committee

January 20, 2023

Lee Casterton





BACKGROUND

Background

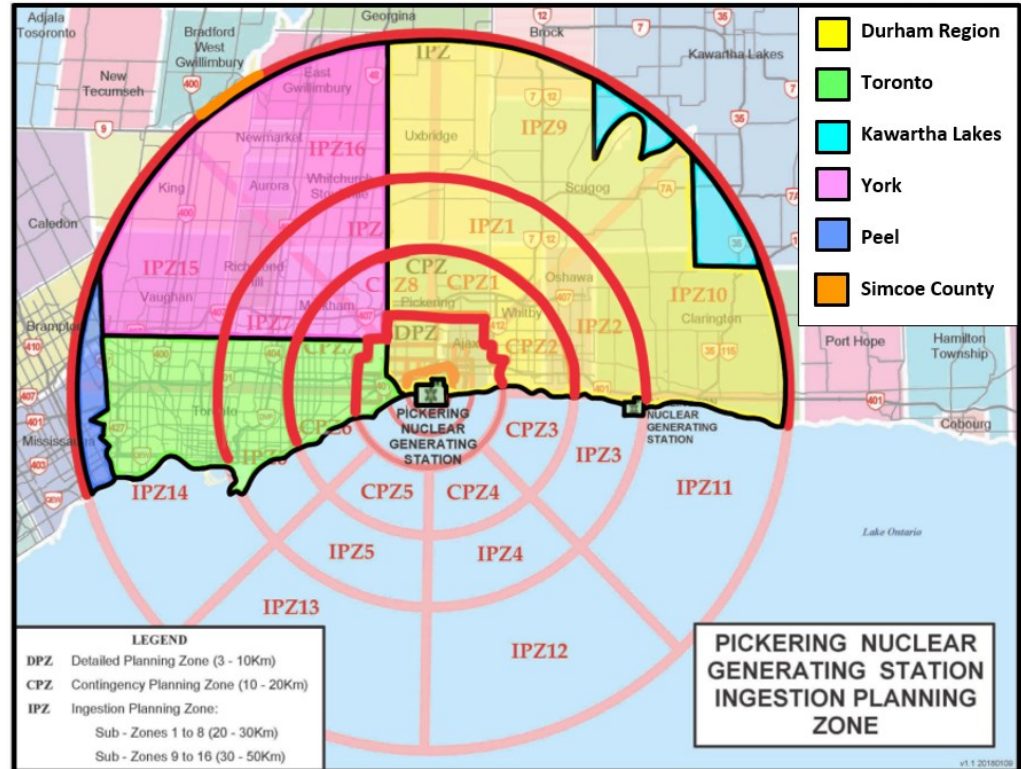
- CNSC Public Hearing on the Pickering licence renewal (June 2018)
 - Intervenors raised concerns on Potassium Iodide (KI) Pill pre-distribution and distribution in an emergency in the Ingestion Planning Zone (IPZ)
 - Commitment by CNSC staff to form a working group to provide clarity on the roles and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



Working Group Membership



Signatories to the TOR:



CNSC



MOH



EMO



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 (Complete)

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 during an emergency at Pickering, if necessary

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

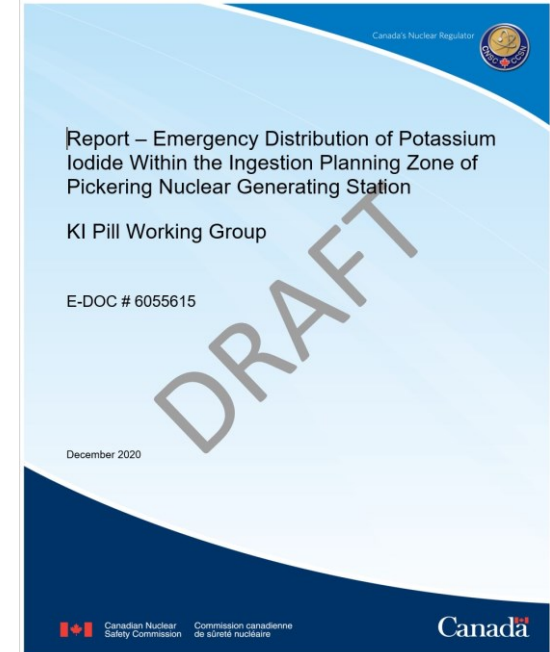
A screenshot of the Canadian Nuclear Safety Commission (CNSC) website. The page is titled "Potassium Iodide (KI) Pill Working Group" and is part of the "Resources" section. The page includes a navigation menu with options like "The Commission", "Uranium", "Reactors", "Nuclear substances", "Waste", "Acts and regulations", and "Resources". The main content area features a "Resources" sidebar with links to "Environmental reviews", "A-12", "Indigenous consultation, engagement and reconciliation", "CNSC Speaker Series", "Learning Portal", "Forms", "International cooperation", "Nuclear licensees across Canada", "New nuclear projects", "News Room", "Presentations", "Protocols", "Publications", "Radiation", and "Scientific and Technical Information". The main text area provides information about the Potassium Iodide (KI) Pill Working Group, stating that it was established in 2019 to provide clarity on existing plans and associated responsible authorities to distribute KI pills in the event of an emergency at the Pickering Nuclear Generating Station (PNGS). It also mentions that the working group is co-chaired by the CNSC and includes representatives from the Fire Marshal and Emergency Management (FMEM), the Ontario Ministry of Health and Long-Term Care (MOHLTC), and Ontario Power Generation (OPG). A map titled "Figure 1. Pickering Nuclear Generating Station Ingestion Planning Zone" is displayed, showing the PNGS and its surrounding areas, with concentric red circles representing the ingestion planning zones. The map includes labels for various zones such as IPZ1, IPZ2, IPZ3, IPZ4, IPZ5, IPZ6, IPZ7, IPZ8, IPZ9, IPZ10, IPZ11, IPZ12, IPZ13, IPZ14, IPZ15, IPZ16, IPZ17, IPZ18, IPZ19, IPZ20, IPZ21, IPZ22, IPZ23, IPZ24, IPZ25, IPZ26, IPZ27, IPZ28, IPZ29, IPZ30, IPZ31, IPZ32, IPZ33, IPZ34, IPZ35, IPZ36, IPZ37, IPZ38, IPZ39, IPZ40, IPZ41, IPZ42, IPZ43, IPZ44, IPZ45, IPZ46, IPZ47, IPZ48, IPZ49, IPZ50, IPZ51, IPZ52, IPZ53, IPZ54, IPZ55, IPZ56, IPZ57, IPZ58, IPZ59, IPZ60, IPZ61, IPZ62, IPZ63, IPZ64, IPZ65, IPZ66, IPZ67, IPZ68, IPZ69, IPZ70, IPZ71, IPZ72, IPZ73, IPZ74, IPZ75, IPZ76, IPZ77, IPZ78, IPZ79, IPZ80, IPZ81, IPZ82, IPZ83, IPZ84, IPZ85, IPZ86, IPZ87, IPZ88, IPZ89, IPZ90, IPZ91, IPZ92, IPZ93, IPZ94, IPZ95, IPZ96, IPZ97, IPZ98, IPZ99, IPZ100. The map also shows the location of the PNGS and its surrounding areas, including the Pickering Nuclear Generating Station Ingestion Planning Zone. The source of the map is cited as "Source: Office of the Fire Marshal and Emergency Management". Below the map, there is a "Description" section titled "What is KI?" which explains that 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. It also states that 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.

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 was presented to the Commission on January 26, 2022 completing Phase I





APPROACH FOR PHASE II

EMO/MOH Proposal

- In June 2022, EMO and MOH proposed to the CNSC and OPG (collectively the signatories to the Terms of Reference) that the Phase II objectives could be completed by the province through the update to the PNERP
 - EMO would provide the Working Group with a discussion paper that considers the Phase II objectives and would inform the PNERP update
 - The Working Group would be utilized as a forum for discussion and input on the discussion paper
- In August 2022, EMO and MOH provided a written proposal outlining the new approach which was shared in September with the Commission

EMO/MOH Proposal

- In October 2022, senior management from the signatory organizations concurred with the new approach for Phase II
- The Working Group received the EMO discussion paper in December 2022 for review



NEXT STEPS

Next Steps

- The Phase I Report will be posted on the Working Group webpage and supported by public communication
- The Working Group webpage and Terms of Reference to be revised to reflect the new approach to Phase II
- EMO to address the Phase II objectives through the update to the PNERP
 - Updated PNERP will undergo a public review period led by EMO



Canadian Nuclear
Safety Commission

Commission canadienne
de sûreté nucléaire

Canada



Thank You! Questions?

nuclearsafety.gc.ca

Connect With Us



nuclearsafety.gc.ca

