Pilot Project
Quebec Housing Corporation .

Le Radon

Sandra Vigneau, architecte

Société d'habitation Québec

Presentation Outline:

- Quebec Housing Corporation (SHQ)
- Pilot Project
- Results of the Pilot Project
- Corrective Measures Taken

Quebec Housing Corporation .

Mission

- Improve access to adequate housing
- Contribute to the improvement of adequate housing
- Support community initiatives including research and development for adequate housing
- Take actions to help 225000 Quebec households each year.

Quebec Housing Corporation .

Mission (suite)

As a principal government agency responsible for housing in Quebec, the Quebec Housing Corporation (SHQ) contributes, by its actions, to improve quality of life for the citizens by offering them adequate conditions of housing in accordance with their financial resources available and their needs.

In addition, the SHQ adheres to government guidelines, particularly with respect to sustainable development, solidarity and social inclusion.

Quebec Housing Corporation

Low Rental Housing Program

The Low Rental Housing program is composed of buildings subsidized in the operating deficit of property:

- Public (SHQ and provincial housing)
- Private (Co-op and Non-profit)

- Number of Buildings: 7 439
- Number of Units : Approx: 74 000

Pilot Project

Relevance to the SHQ

- Risk not NEGLIGABLE and CONTROLLABLE for the health of the residents
  - Health Canada reports that 16 % of lung cancers are attributable to radon in homes
  - It is the 2nd leading cause of lung cancer after to smoking
- Support of l'INSPQ and Health Canada
- The SHQ has the responsibility to act in a proactive manner
- Need to establish the costs for the whole HLM

Presenting the Pilot Project

Targeted sector

Présentation du projet pilote

Targeted sector

Présentation du projet pilote

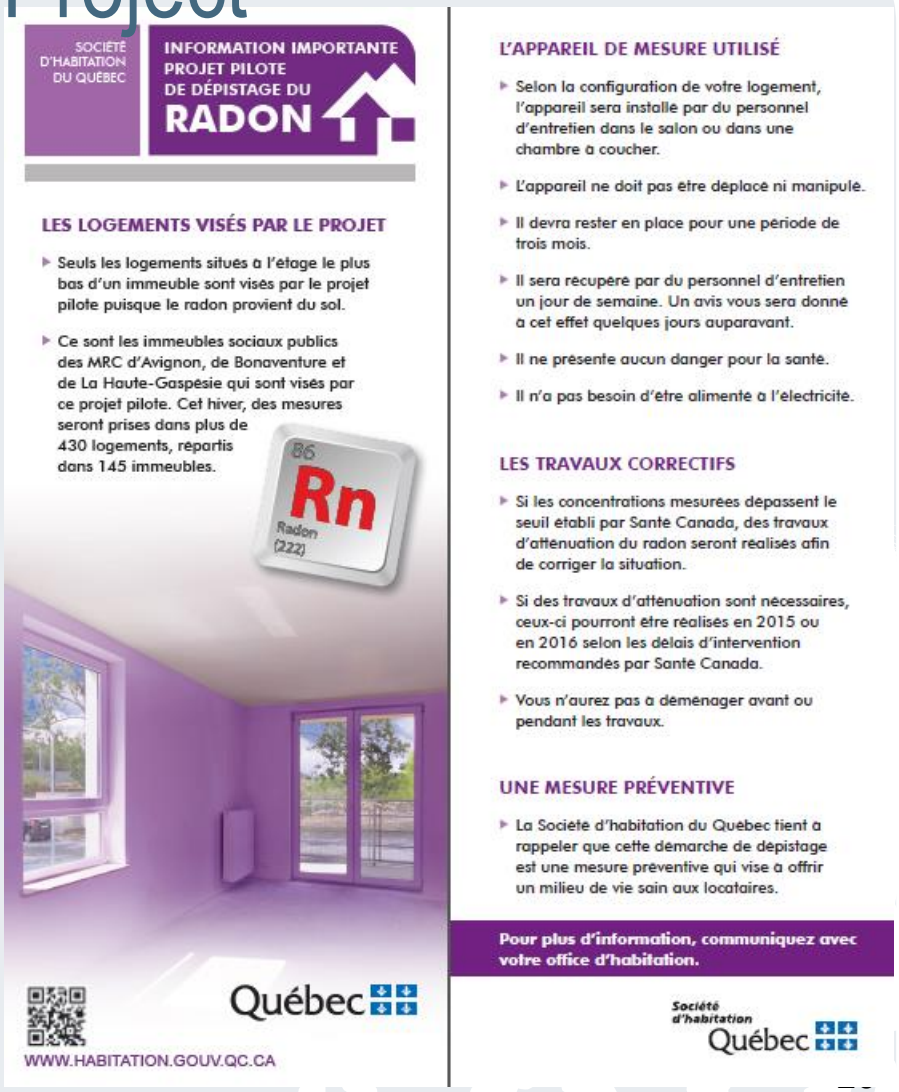
Communication Strategy

- Objectives
  - Inform tenants without be alarmist
  - Inform the network of the Social Housing
  - Inform managers of these buildings

  About the process of implementation of the pilot project, communication tools available to them and on the health risks associated with radon.
- Activities carried out
  - Announcement of the pilot project of measurement and radon mitigation (Winter 2014)
  - Preparation for the deployment of measuring devices (Winter 2014)
  - Transmission of information during the installation of measuring devices Transmission of results to managers concerned (2015)
  - Publication of a report in the spring of 2016.

Presentation of the Pilot Project

Communication Strategy



SOCIÉTÉ D'HABITATION DU QUÉBEC

INFORMATION IMPORTANTE
PROJET PILOTE
DE DÉPISTAGE DU
RADON

LES LOGEMENTS VISÉS PAR LE PROJET

- Seuls les logements situés à l'étage le plus bas d'un immeuble sont visés par le projet pilote puisque le radon provient du sol.
- Ce sont les immeubles sociaux publics des MRC d'Avignon, de Bonaventure et de La Haute-Gaspésie qui sont visés par ce projet pilote. Cet hiver, des mesures seront prises dans plus de 430 logements, répartis dans 145 immeubles.

86 Rn Radon (222)

Québec

WWW.HABITATION.GOUV.QC.CA

L'APPAREIL DE MESURE UTILISÉ

- Selon la configuration de votre logement, l'appareil sera installé par du personnel d'entretien dans le salon ou dans une chambre à coucher.
- L'appareil ne doit pas être déplacé ni manipulé.
- Il devra rester en place pour une période de trois mois.
- Il sera récupéré par du personnel d'entretien un jour de semaine. Un avis vous sera donné à cet effet quelques jours auparavant.
- Il ne présente aucun danger pour la santé.
- Il n'a pas besoin d'être alimenté à l'électricité.

LES TRAVAUX CORRECTIFS

- Si les concentrations mesurées dépassent le seuil établi par Santé Canada, des travaux d'atténuation du radon seront réalisés afin de corriger la situation.
- Si des travaux d'atténuation sont nécessaires, ceux-ci pourront être réalisés en 2015 ou en 2016 selon les délais d'intervention recommandés par Santé Canada.
- Vous n'aurez pas à déménager avant ou pendant les travaux.

UNE MESURE PRÉVENTIVE

- La Société d'habitation du Québec tient à rappeler que cette démarche de dépistage est une mesure préventive qui vise à offrir un milieu de vie sain aux locataires.

Pour plus d'information, communiquez avec votre office d'habitation.

Société d'habitation Québec

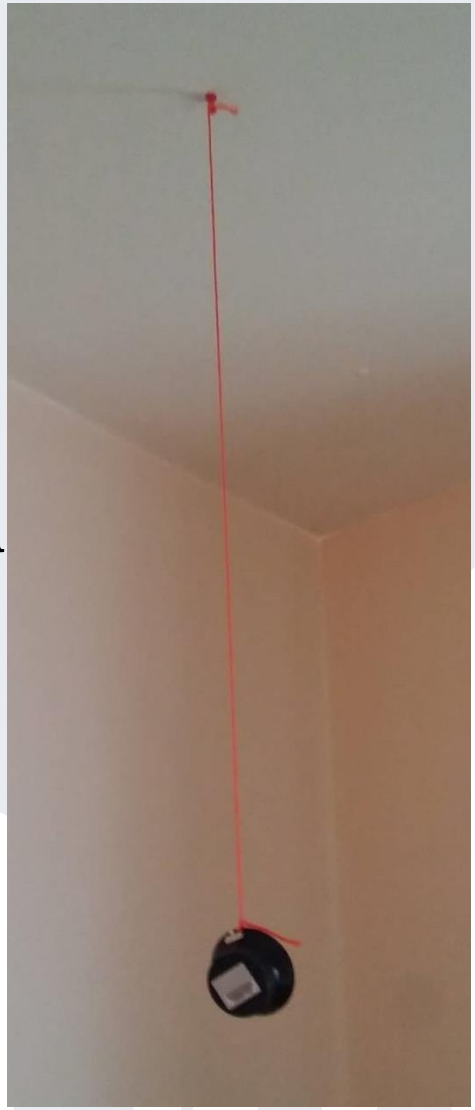
The results

Measures taken

- 430 houses targeted
- Multifamily, Row Houses, Duplex, side by side
- Slab on soil or subsoil

An alpha-track detector located at ground level, in a bedroom or in a salon, for a duration of three months

Detectors were sent to the laboratory for analysis.



The Results

Of the 430 targeted housing, 402 detectors were placed.

The deployment of dosimeters was impossible in some housing:

- Some tenants did not allow access to housing
- Some units had major renovations in progress.

Among the 402 detectors placed, 380 were sent to the lab.

Some measures have not been able to be analyzed (5.5%):

- Some detectors were not able to be recovered;
- Some detectors were considered invalid by the laboratory. .

The Results

380 tests were completed:

- 54 housing units have concentrations of radon between 200 Bq/m³ and 600 Bq/m³ (25 buildings affected).
- 7 housing units have concentrations of above 600 Bq/m³ (5 building affected).

The highest level: 992 Bq/m³

The average test: 130 Bq/m³

The Results

Canadian Guidance

Radon Concentration	Recommended time for Action
< 200 Bq/m^3	No Action Required
Entre 200 Bq/m^3 et 600 Bq/m^3	Mitigate within 2 years
> 600 Bq/m^3	Mitigate within 1 year

The higher the radon concentration, the faster action should be taken. As any concentration of radon presents a risk to health, the occupants can, if they wish, take corrective measures at concentrations lower than 200 Bq/m^3.

Corrective Measures

Scenario 1: No action to undertake

Radon levels under the Federal Government's Guideline.

Scenario 2: Additional Investigation

Because of the uncertainty of the measurement at (200 to 225 Bq/m³) or when it was impossible to obtain a reading of the measure.

Scénario 3: Mitigation Recomended

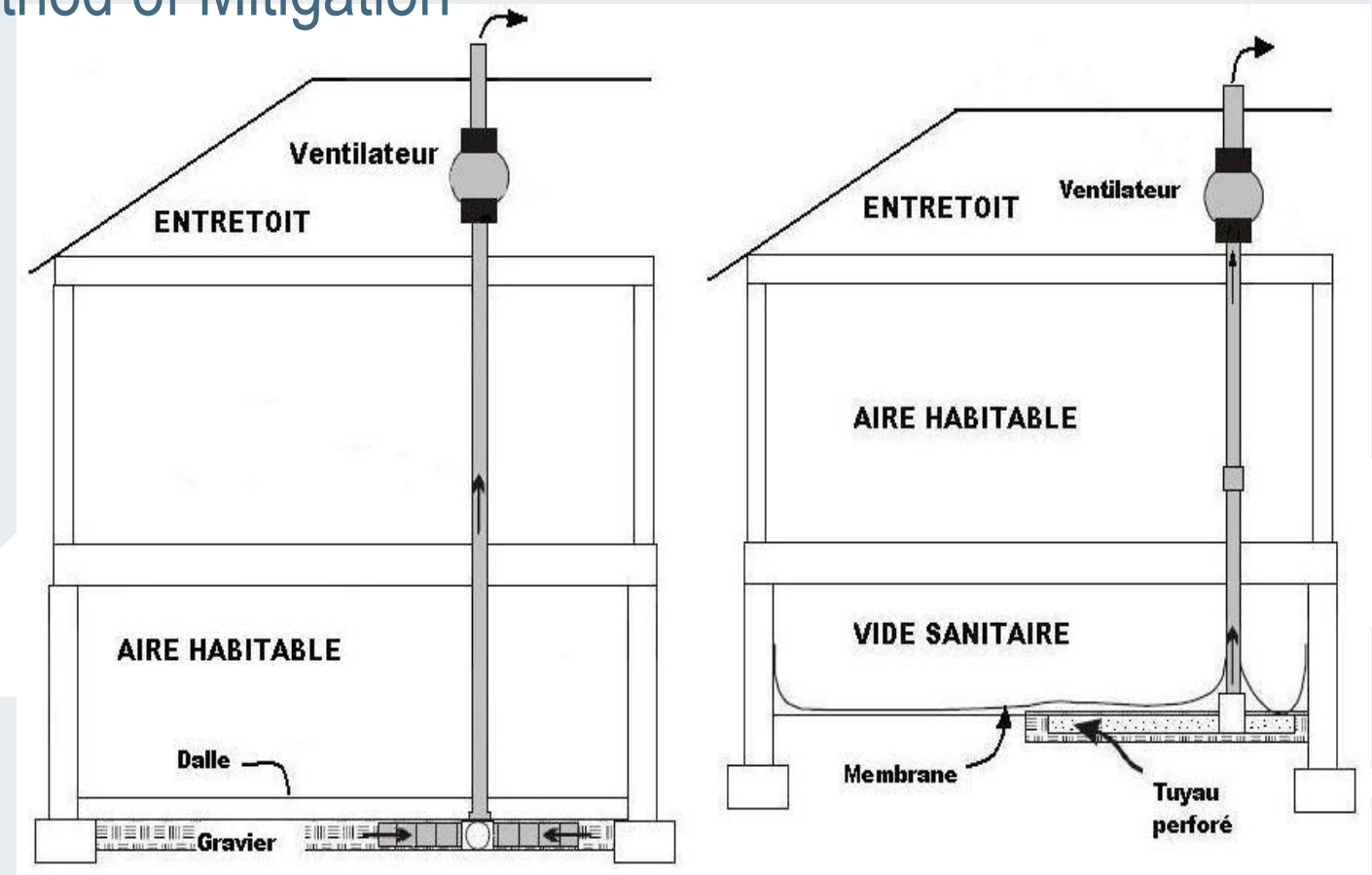
When radon concentrations are between 225 et 600 Bq/m³, mitigation measures must be undertaken within 2 years.

Scenario 4: Mitigation Recommended

When concentration greater than 600 Bq/m³, mitigation measures must be undertaken the following year.

Corrective Measures

Method of Mitigation



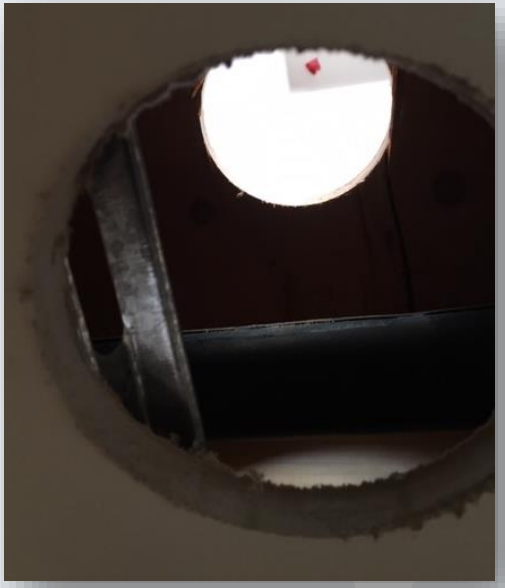
Acrive Soil-Depressurization

Photos of work in progress..

Communication testing: Sainte-Anne-des-Monts

Photos of work in progress.

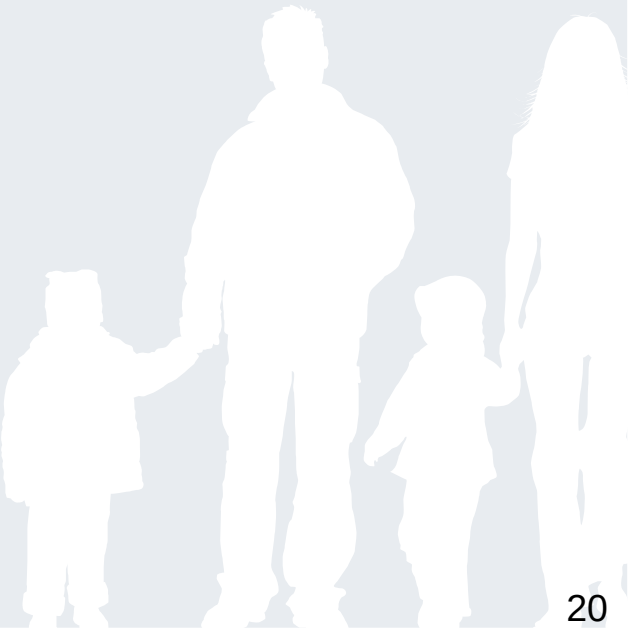
Mitigation Work: Saint-François-D'Assise



Conclusion

Next Steps

- Publication of Summary Report (Spring 2016)
- Decide how SHQ is going to proceed with all the housing units in the park.

Questions?

Thank you.