http://www.workers-safety.ca/

newsletter

CELA report on Radon.

The Canadian Environmental Law Association has issued a report on the legal regulation of radon in federal and provincial contexts. **Radon CAS 10043-92-2** is a chemically inert gas with radioactive isotopes. It is encountered by building residents. It comes from naturally occurring geological radioactive decay in various regions in Canada. And, it is encountered by workers in underground mines. The CELA media release:

Radon in Homes, Schools, and Workplaces: CELA Finds Legal Protections Lacking November 25, 2014

Toronto – In a report released today and in time for Radon Action Month, the Canadian Environmental Law Association (CELA) concludes that Canadians need better legal protection from radon gas, a known carcinogen.

"We analyzed policy and law across Canada and found a patchwork of unenforceable guidance and inconsistent rules to confront this public health risk," stated Kathleen Cooper, Senior Researcher with CELA and a report co-author.

Radon is an odourless, colourless gas. Arising from the natural breakdown of uranium in the ground, it is an *indoor* pollutant. Like all radiation sources, radon can cause cancer. It can enter our homes, schools, and workplaces, where we generally spend over 80% of our time.

"After smoking, indoor radon exposure is the leading cause of lung cancer. We have identified it as a top priority for action in our research into carcinogens," stated Dr. Anne-Marie Nicol, Principal Investigator with CAREX Canada, an organization of experts creating an evidence-based carcinogen surveillance program for Canada.

An estimated seven percent of homes in Canada likely have unsafe radon levels as shown by Health Canada's Cross-Canada Radon Survey. While some areas of Canada are known to have high radon levels, Health Canada's survey evidence confirms that *all homes* need to be tested.

 CELA Radon report. 86Rn²²² R v Metron 3 R v Swing "N" Scaff R v Deschamps R v Kazenelson Clinic's Board & committees. 4 in the press -5 • Methyl isocyanate -- Bhopal, India. 5 • Methyl mercaptan -- Fatal Gas Leak in Texas. 5 North Dakota Oil. • Assaults on Union Leaders -- Bangladesh. 5 • Takata Airbags. 6 • Arms-Disposal safety -- Bulgaria. 6 6 • Spill in West Virginia. Hs-cfacebook. twitter. 6 data added to http://www.workers-safety.ca/ 6 7 notes. · for future issues. 8 publication data. 8

in this issue: Vol. 23 No.1. Janaury 2015.

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"CELA's report helps us better understand the legal framework in Canada, and

how it can be improved so that we can make our homes, schools, and workplaces healthier, including for radon mitigators, and so we can ultimately eliminate radon-induced lung cancers," stated Bob Wood, President of the Canadian Association of Radon Scientists and Technologists.

Among the report findings:

• Under the National Radon Program, the federal government has provided some important leadership including setting a "reference level" for indoor radon at 200 Bequerels per cubic metre (Bq/m3), conducting cross-Canada radon testing, updating the guidance provided to provinces and territories in the National Building Code, establishing a Canadian certification program for radon mitigation professionals, and extensive public outreach encouraging testing for radon in all homes across Canada.

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- However, we recommend that the Radon Guideline's reference level be lowered to 100 Bg/m3 (as recommended by the World Health Organization). The federal government should also provide a radon mitigation tax credit; a logical next step after several years of urging that all homes be tested.
- Although Canada's provinces and territories are modernizing radon provisions in their building codes to reduce radon risks in new construction and major renovations, existing homes are not protected in law. Greater public awareness is needed so homeowners test for radon and remediate if necessary.
- We found confusion and uncertainty about radon rules for workplaces creating potential health risks for all workers. Some provincial/territorial compliance offices apply the Naturally Occurring Radioactive Materials (NORM) Guidelines to workplaces for 'incidentally exposed workers', while others denied that radon is an occupational health and safety issue. Such variability in enforcement means inconsistent worker protection. It is also conceivable that some workers could be over-exposed to radon in both the workplace and their homes if high radon levels existed in both of these indoor spaces.
- We found a lack of clarity among provincial and territorial public health officials on their inspection powers including when they should inspect for radon and whether any limits to their powers would arise concerning the need for a minimum three-month test to be a reliable radon measure, with little to no guidance from the case law.
- We found little to no recognition of radon risks in program delivery for home energy efficiency measures. Homes participating in these programs, or homeowners doing their own energy efficiency work, need to test for, and if necessary mitigate, elevated radon levels that are known to result from tightening the building envelope.

CELA's report makes 14 recommendations for addressing radon risks, and filling gaps in research, policy and law. It is available on-line at www.cela.ca

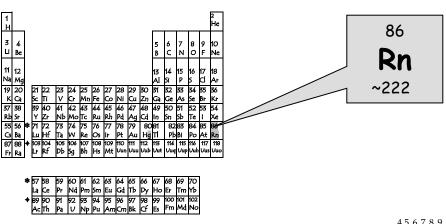
http://www.cela.ca/newsevents/radon-homes-schools-and-workplaces-cela-finds-legal-protections-lacking http://www.cela.ca/publications/radon-indoor-air-review-policy-and-law-canada

http://www.cela.ca/sites/cela.ca/files/Radon-Report-with-Appendices_0.pdf

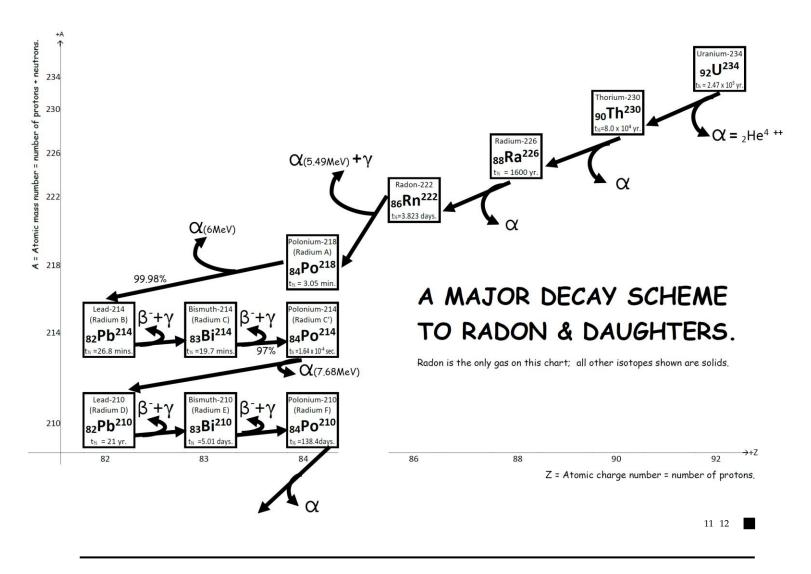
All of the naturally occurring isotopes of radon are radioactive. Of prominent abundance, Radon-222

CAS 14859-67-7

is of concern because its nuclear decay products, the radon daughters, which are solids, starting out with a positive electrical charge, are known respiratory carcinogenic health hazards. ² ³



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Cases progress -

R v Metron -- Cases continue

Court proceedings continued for prosecutions related to the swing stage failure that resulted in fatalities and injury, Toronto, 24 December 2009. On 04 December 2014, in R v Swing "N" Scaff and in R v Deschamps, guilty pleas were entered in Ontario Court, Old City Hall, before Her Honour Justice Greene, for Occupational Health & Safety Act charges as against the corporation that provided the swing stage, and as against a corporate executive personally.

The corporation was fined $\$350\ 000 + 25\%$ surcharge, with one year to pay. The executive was fined $\$25\ 000$ **x** 2 + 25% surcharge. A transcript of these proceedings has been ordered – hopefully to be copied in a subsequent issue of this *newsletter*.

OH&S Act proceedings as against another person, as a supervisor for the main contractor, in Rv Kazenelson, were adjourned to 05 March 2015, Old City Hall, 111 court, 9am. That person is also facing a criminal negligence trial at Superior Court, 361 University Avenue, starting 05 January 2015.

This swing stage tragedy has been reported in this newsletter previously: 123456789

Clinic Board members & committees.

Clinic Board membership is elected for staggered two-year terms.¹²³ ~½ of the Board was elected, or reelected, at the previous AGM, 22 October 2014, so that now:

• ending ~October 2015:

Sumaiya Sharmeen Georgina Clinton John Field Genevieve D'Iorio Diana Dongak-Lee Carl Mohan Selvathy Kumar [1 vacancy]

• ending ~October 2016:

Hilary Balmer Jason Achorn Ivan Lancaric Titilayo Igor Victoria Padel Bola Ore Michael Grossman

Clinic committees continue after the AGM until Board or Executive decisions would make changes. As of now, committee membership:

●Executive Committee - [to assist the Board in its functions, and to act for the Board when the Board is unable to meet]:

Carl Mohan - Chair Hilary Balmer - Vice-Chair Michael Grossman - Treasurer Jason Achorn - Secretary Ivan Lancaric - Member-at-Large

●Personnel Committee – [To negotiate with Clinic staff on terms and conditions of their employment and to resolve all other personnel matters that may arise]:

Carl Mohan (ex officio) Hilary Balmer John Field Diana Dongak-Lee Victoria Padel •Planning & Priorities Committee – [To set Clinic priorities in relation to casework, community education and organizing and law reform, within parameters of Objectives of the Clinic as established by the Board; to decide which kind of cases the Clinic will undertake and whether or not particular cases fall within one of these categories]:

Carl Mohan (ex officio) Hilary Balmer John Field Selvathy Kumar

• *newsletter* Committee – [To consider improvements to the Clinic's *newsletter*]:

Carl Mohan (ex officio) Michael Grossman Genevieve D'Iorio Bola Ore •Outreach Committee – [To develop and implement strategies for reaching non-unionized workers with OH&S problems and to monitor and evaluate all outreach undertaken by the Clinic]:

Carl Mohan (ex officio) Hilary Balmer Jason Achorn Victoria Padel Diana Dongak-Lee Genevieve D'Iorio Bola Ore ● **Website** Committee – [To consider improvements to the Clinic's website]:

Carl Mohan (ex officio) John Field Michael Grossman Victoria Padel

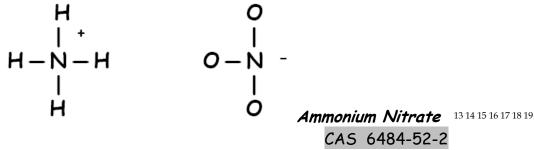
in the press -

• In The New York Times: "W.M. Anderson, 92, Dies; Led Union Carbide in '80s / A career blemished by a horrific accident that killed thousands in Bhopal, India." 2

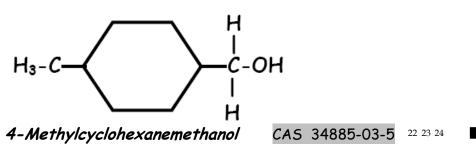
• Also in The New York Times: "Agencies Look for Cause of Fatal Gas Leak in Texas / A Dupont pesticide plant where four employees died." 6

- Also in The New York Times: "North Dakota Regulators Tell Producers To Filter Crude Oil of Flammable Liquids / The rules are an effort to prevent deadly explosions when rail cars are punctured." 8
- Also in The New York Times: "Attacks on Union Leaders At Bangladesh Factories
 Assaults lead 2 major apparel companies to end or suspend orders." 9 10

● Also in The New York Times: "Compound in Takata Airbags is Inquiry's Focus." 11 12



- Also in The New York Times: "A 'Moonscape' in Bulgaria After Blast at Arms-Disposal Plant / Thriving Industry Has Safety Problems." 20
- Also in The New York Times: "Owners of Chemical Company Charged in Spill That Tainted West Virginia Water" 21 "...[US] federal grand jury ... indicted ..."



http://www.workers-safety.ca/

https://www.facebook.com/pages/Toronto-Workers-Health-and-Safety-Legal-Clinic/226662537458898?fref=ts

https://twitter.com/TWHSLC

data added to http://www.workers-safety.ca/

documenting Clinic's law reform advocacy, etc.

http://www.workers-safety.ca/ Home page Main Menu Publications Downloads

2014 10 30. TWHSLC Bill 18 Submissions .pdf 2014 10 31. Financial Report.PDF

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NOTES:

CELA Radon report.

Radon-222 86Rn²²² =3.823 days. [Xe] 4f¹⁴ 5d¹⁰ 6s² 6p⁶

CAS 14859-67-7

- ² http://www.epa.gov/radon/pubs/citguide.html
- ³ http://en.wikipedia.org/wiki/Radon
- ⁴ American Chemical Society Periodic Table http://acswebcontent.acs.org/games/pt.html
- ⁵ http://www.rsc.org/periodictable/element/86/radon
- 6 http://10043-92-2.msds-cas.com/
- 7 http://en.wikipedia.org/wiki/Isotopes_of_radon
- ⁸ American Chemical Society Periodic Table
- www.acs.org/content/acs/en/education/whatischem istry/periodictable.html
- http://www.rsc.org/periodic-table/
- 10 Brookhaven National Laboratory Chart of http://www.nndc.bnl.gov/chart/ Nuclides

 α = alpha particle = ${}_{2}He^{4} + {}_{2}He^{4} + {}_{3}He^{4} + {}_{4}He^{4} + {}_{5}He^{4} + {}_{5}He^{4$

 β^- = beta particle = $_1e^{0}$ = electron.

Y = gama ray,

with energy determined by its wavelength λ .

 $E = h c / \lambda = h v$

 $t_{1/2}$ = half-life = $\log_e 2$ / radiation decay constant

- = .69315 / radiation decay constant
- = time for half of the radioactive isotope to disappear by decaying into another isotope which might have decay kinetics of its own.

12 M. Grossman, The Law of Occupational Health and Safety in Ontario, Second Edition, Butterworths, Toronto and Vancouver, Aug. 1994, ISBN 0-409-90414-7; Appendix II, pages II-16 \rightarrow II-22. Now out of print.

R v Metron, et al.

¹ Vol. 22 No. 4, page 12. September 2014.

² R v Metron Construction Corporation, 2013 ONCA 541 2013 09 04 DOCKET: C55883

Let Majesty the Queen, Appellant and Metron Construction Corporation, Respondent; 23April 2013. On appeal from the sentence of Justice Robert G. Bigelow, Ontario Court of Justice, Old City Hall, Toronto, 13 July 2012; reasons reported:2012 ONCJ 506, [2012] O.J. No. 3649.

Judgment of S.E. Pepall JA; with concurrences of M. Rosenberg JA & David Watt JA.

3www.ontariocourts.ca/decisions_index/en

www.ontariocourts.ca/decisions/2013/2013ONCA0541.pdf ⁴ Vol. 21 No. 5, page 6. 2013 10. Vol.21 No.5.doc 2013 10. Vol.21 No.5 pdf

⁵ September 2013, Vol.21, No.4, page 7

6"case in progress ... -- swing-stage scaffold fatalities --

" Vol.20 No.2 pages 10 & 11.

"Vol.20 No.2 pages 10 x 11."
"case still in progress ... - swing-stage scaffold fatalities - "Vol.20 No.4 page 5.

8 See in this newsletter July 2012 Vol.20 No.3 pages 1-4...
--swing-stage scaffold

9"case still in progress ... --swing-stage scaffold fatalities -- "Feb. 2013, Vol.21, No.1, pages 1 & 2.

Clinic's Board & committees.

¹ Previous : <u>2013 10. Vol21 No5</u> , pages 8 & 9. ²See: BOARD ORIENTATION MANUAL;

CONSTITUTION AND BY-LAWS, ARTICLE THREE. http://www.workers-safety.ca/

http://www.workers-

safety.ca/publications?dir=publications%3A+newslette r%2C+Workers+Guide%2C+FACT+SHEETS%2C+repor ts%2C+etc%7C2002+06++Board+Manual

See in this *newsletter*, September 2014, Vol.22, No. 4, page 5. For previous: April 2012, Vol.20, No.1, page 5; Oct.. 2011, Vol.19, No.2, page 10; Vol.18, No.3, July 2010, page 2; Vol.17, No. 3, June 2009, page 13; Sept. 2009, Vol.17, No.04, page 8.

⁴ For previous see in this *newsletter* - September 2012. Vol.20, No.5, page 1, notes 23 → 28.

⁵ Board and committee members may be contacted through the Clinic's phone number or e-mail.

⁶ Clinic members who would want to participate on the Board or a committee are invited to contact Linda Vannuci, Lawyer/Director vannucl@lao.on.ca . 7See: BOARD ORIENTATION MANUAL; CONSTITUTION AND BY-LAWS, ARTICLE THREE. http://www.workers-safety.ca/

http://www.workers-safety.ca/publications?dir=publications%3A+news letter%2C+Workers+Guide%2C+FACT+SHEETS% 2C+reports%2C+etc%7C2002+06++Board+Manual For previous see in this *newsletter*: April 2012, Vol.20, No.1, page 5. October 2011, Vol.19, No.2, page 10; Vol.18, No.3, July 2010, page 2; Vol.17, No. 3, June 2009, page 13; Sept. 2009, Vol.17,

No.04, page 8.

in the press -

² Methyl isocyanate -- Bophal. Douglas Martin, "W.M. Anderson, 92, Dies; Led Union Carbide in '80s / A career blemished by a horrific accident that killed thousands in Bhopal, India." The New York Times, OBITUARIES, 31 October 2014, page B16.

4http://en.wikipedia.org/wiki/Bhopal_disaster http://en.wikipedia.org/wiki/Methyl isocyanate http://www.bhopal.net/

- ⁵ See in this *newsletter*: "...What are *CAS Numbers* ...," 2008 07. Vol.16 No.3, pages 4→7.
- 6 Methyl mercaptan -- Texas. Manny Fernandez, "Agencies Look for Cause of Fatal Gas Leak in Texas / A Dupont pesticide plant where four employees died," The New York Times, National, 17 November 2014, page A 12.

http://en.wikipedia.org/wiki/Methanethiol http://www.cdc.gov/niosh/idlh/74931.html 8 North Dakota Oil. Clifford Krauss, "North Dakota Regulators Tell Producers To Filter Crude Oil of Flammable Liquids / The rules are an effort to prevent deadly explosions when rail cars are punctured," The New York Times, 10 December 2014, page B5.

⁹Bangladesh Factories. Steven Greenhouse, "Attacks on Union Leaders At Bangladesh Factories," The New York Times, 23 December 2014, pages B1 & B4.

10http://topics.nytimes.com/top/reference/timestopic s/people/g/steven_greenhouse/index.html

- ¹¹ Takata Airbags. Hiroko Tabuchi, "Compound in Takata Airbags is Inquiry's Focus," The New York Times, 10 December 2014, pages B1 & B9. 12 See also: [full page advertisement], "An Open Letter From Takata Corporation," The New York
- 13 (NH₄)+ (NO₃)-CAS 6484-52-2

Times, 18 December 2014, page A28.

- 14 http://www.csb.gov/ use search term "ammonium nitrate." US Chemical Safety Board, Washington, DC 20037-1809.
- 2013 10. Vol.21 No.5 pdf 2013 10. Vol.21 Page 11. No.5.doc
- 2013 06. Vol21 No2 ammonium nitrate
- 2013 07. Vol21 No3 ¹⁸https://www.osha.gov/dep/fertilizer_industry/index.html
- 19 http://en.wikipedia.org/wiki/Ammonium_nitrate
- ²⁰ Arms-Disposal safety. George Kantchev, "A 'Moonscape' in Bulgaria After Blast at Arms-Disposal Plant / Thriving Industry Has Safety Problems." The New York Times, 03 October 2014, page A10.
- 21 Spill in W.Va. Michael Wines, "Owners of Chemical Company Charged in Spill That Tainted West Virginia Water," The New York Times, 18 December 2014, page A23.
- ²² See in this *newsletter*: 2014 05. Vol.22 No.2 , page 9. ²³ 4-Methylcyclohexanemethanol MCHM

CAS 34885-03-5 CH₃C₆H₁₀CH₂OH 128.21 g/mol. ²⁴http://en.wikipedia.org/wiki/4-methylcyclohexanemethanol

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data added to http://www.workers-safety.ca/

7 Vol. 23 No.1. January 2015.

for future issues:

- Maquila. www.maquilasolidarity.org
- Canadian federal OH&S inspections.*
- •US Chemical Safety & Hazard Investigation Board.
- topic revisited—Ministry of Labour library. **
- book review: Occupational Health & Safety-Theory, Strategy & Industry Practice, 2nd Edition. ***

**See in this newsletter Vol. 15 No.4.

***_{LexisNexis}

http://www.lexisnexis.ca/bookstore/bookinfo.php?pid=2089

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not legal advice. This newsletter includes information considered correct and up-to-date according to its context. It also contains opinions. But nothing here should be taken as legal advice. Legal advice should be obtained from professional counsel, which might include our Clinic's lawyers, when acting on a lawyer-client basis.

Errors and misstatements happen, although we try to be careful and strive for accuracy. We would try to correct as soon as possible. Please let us know if you see any needed corrections or explanations.

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