
Dear Dr. Binder:

I understand that the Canadian Nuclear Safety Commission (CNSC) is on guard to protect citizens from the radioactive emissions of the nuclear industry. I note that it is also on guard to protect Canada's nuclear industry from what CNSC regards as over-stated expressions of concern by ordinary citizens regarding potential health and environmental impacts from licensed nuclear activities.

In particular, I note your strong stance against what you describe as misinformation, as expressed in your article posted on the CNSC web site entitled "*Response to Gordon Edwards Articles in Le Devoir and Montreal Gazette, August 9, 2013*". [<http://tinyurl.com/mz2jar6>], although you do not identify any false statements.

The Canadian Coalition for Nuclear Responsibility (CCNR) has for more than 40 years been working to counteract misinformation about nuclear issues, always focusing on specific false claims.

In this connection, I can recall no case where the CNSC has taken the initiative to publically identify or counteract any cases of misinformation or misleading statements published by nuclear proponents. Should such instances exist, I would appreciate seeing an example of a CNSC posting of this kind.

At any rate, in your recent posting CCNR has identified two cases of what we regard as misinformation or misleading statements. The first concerns the recycling of radioactive metal from the nuclear industry, and the second has to do with the transport of liquid nuclear wastes over public roads.

I. THE RECYCLING OF RADIOACTIVE METALS

In your recent posting you refer to the "accepted practice of reusing and recycling" radioactively contaminated metal from used nuclear steam generators. I believe this statement to be an example of misinformation, as you fail to indicate who it is that accepts this practice. Is it the Canadian public? Is it the scrap metal recycling industry? Or is it just the nuclear power industry and its regulator?

Blending radioactively contaminated waste metal into uncontaminated molten scrap metal, then making that blend available on the market for unrestricted use without any labeling to indicate that that scrap metal contains "recycled radioactive waste", is, to the best of my knowledge, not an accepted practice in civil society. I believe the only way that radioactively contaminated metal from nuclear reactors can end up on the market is if buyers and users are kept in the dark about its specific radioactive content.

The "3R's" -- Reduce, Reuse, Recycle -- do not apply to hazardous materials like asbestos or radioactive waste from nuclear reactors; only the first R applies. These wastes should definitely be reduced, but not recycled. (There are two other "Rs" that do apply to radioactive waste: "Repackage" and "Retire".)

The word "recycling" implies a willing re-use of a given material for a second or third time, based on the fact that the material retains many of the characteristics that made

it useful in the first place and that it has not been contaminated with unwelcome pollutants.

Thus civil society supports a thriving market for recycled paper, glass, aluminum and steel. Companies worldwide are eager to buy and re-use such recycled materials. But nobody in civil society wants to buy radioactively contaminated scrap metal that has been identified as such, just as nobody in our society wants to buy recycled asbestos-contaminated building materials. Thus, finding a market for radioactively contaminated metal from the nuclear industry requires some degree of subterfuge.

Studsvik is the Swedish company originally contracted to “recycle” metal from Ontario’s radioactively contaminated steam generators – a contract that was just recently annulled. During the September 2010 CNSC Hearings in Ottawa, a Studsvik spokesman explained that (1) all the metal that Studsvik receives is radioactively contaminated material coming from nuclear facilities; (2) Studsvik does not directly market any of this contaminated scrap metal; (3) contaminated metal prepared by Studsvik for “free release” goes to a foundry hired by Studsvik where it is blended with uncontaminated metal from other sources in a ratio of one to ten; (4) after the blending-down process, the resulting material is sold on the open market by the foundry as ordinary scrap metal suitable for use in any commercial products – with no indication that it contains radioactive waste materials from nuclear reactors.

At the CNSC Hearings it was learned that Studsvik had asked the Swedish Radiation Safety Authority to keep confidential the name of the foundry engaged in the blending-down and marketing of its radioactively contaminated metal. Based on Studsvik’s approach, buyers would not only be unable to learn which batches of scrap metal contain nuclear waste materials, but would even be unable to know which dealers are responsible for marketing radioactively contaminated scrap metal.

During the CNSC Hearings, I drew attention to the following statement from the Steel Manufacturers Association [www.steelnet.org/about.html] :

*“Free release of radioactive scrap [metal] could adversely affect the marketability of steel products made from recycled scrap. The public perception is that any level or type of radioactivity is unsafe. Metal recycling industries have worked hard to build public confidence in the safety and utility of products made from recycled metal. This confidence would be lost if the public, rightly or wrongly, perceives such products to be unsafe. For this reason, **SMA members have not, and will not, accept scrap that is known to be radioactively contaminated.**”*

[emphasis added]

[http://www.ccnr.org/SMA_Radioactive_Scrap.pdf]

To the Steel Manufacturers Association, and to ordinary citizens, the “free release” of radioactive waste into articles of commerce is not a matter of “recycling contaminated metal”, but rather a case of “contaminating recycled metal”. During the CNSC hearings I also cited concerns expressed about the radioactive contamination of recycled metal from a United Nations Report. [http://www.ccnr.org/UN_Radioactive_scrap.pdf]

Since you presided over the 2010 hearings in Ottawa, I am surprised that you declare, without qualification, that "recycling" radioactive steam generators is an "accepted practice". Would it not be more accurate to say that recycling radioactively contaminated metal into consumer products is regarded as "accepted practice" by the nuclear power industry, governments that promote it, and agencies that regulate it?

If CNSC can identify other persons or agencies that regard the recycling of radioactively contaminated metal into uncontaminated scrap metal as "acceptable", I feel certain that the Steel Manufacturer's Association, my organization, and many other individuals and groups, would want to know about it.

Until then, I consider your statement that the recycling of radioactive metal from the nuclear industry is an "accepted practice", as a case of misinformation.

II. THE TRANSPORT OF LIQUID NUCLEAR WASTES

Regarding the transport of solid or liquid radioactive wastes over public roads and waterways, CCNR believes that most members of civil society are not willing to accept or encourage this practice as long as there exist viable alternatives for storing and processing the wastes on site – as in the case of Bruce Power and Chalk River Laboratories. This position is not an unreasonable one.

Prior to 2009, Bruce Power signed a contract with Ontario Power Generation (OPG) to have all their radioactive steam generators segmented and stored on site in perpetuity. Bruce Power pledged itself to this course of action in the 2005 Environmental Assessment Review. Thus the shipment of these steam generators to Sweden is not necessary as it reneges on a previous undertaking and serves no obvious public interest – especially as it inevitably involves the marketing of radioactively contaminated scrap metal.

Similarly, during the most recent CNSC licensing hearing for Chalk River Laboratories (CRL), AECL committed itself to the on-site solidification of all high-level radioactive liquid wastes at Chalk River, including the contents of the "FISST" ("Fissile Solution Storage Tank"). AECL has, I believe, been solidifying all newly-produced high-level radioactive liquid wastes at Chalk River for the last 10 years or so.

Thus the unprecedented shipment of this highly toxic, highly radioactive, weapons-grade material in liquid form over thousands of kilometers of public roads seems unnecessary. Concerned citizens are not fully reassured by such criteria as surviving a 9 metre drop or an 800 degree fire, when more spectacular and stressful events have been witnessed quite recently. Moreover, the shipments themselves will establish a controversial precedent, as the transport of high-level radioactive liquid waste over public roads has never previously taken place in North America.

In my view, the above-mentioned posting on the CNSC web site by you in your capacity as President and CEO is incomplete and misleading on the subject of the transport of radioactive liquid materials. You seem to equate the packaging and shipping of small quantities of radioisotopes in liquid form for medical purposes with

the challenges and risks of packaging and trucking high-level radioactive liquid wastes, containing weapons-grade uranium along with dozens of unwanted man-made radionuclides in a thermally active and corrosive solution.

REQUEST FOR INFORMATION

I would appreciate it if you could direct me to any relevant documentation – such as environmental studies and/or risk assessments – that have so far been carried out in the context of these proposed shipments from Chalk River to the Savannah River Site.

I would also appreciate receiving answers to the following three questions:

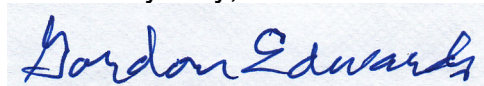
(1) What is the precise radioactive inventory, per litre, of the liquid high-level radioactive waste to be shipped to Savannah River South Carolina? Please include a complete list of radionuclides and the becquerel amount of each.

(2) In your posting you refer to "containers for liquid HEU" as if such containers are presently available. Have the Canadian and American authorities completed the task of approving the design for the containers that will be used to transport the liquid high-level radioactive waste from Chalk River? If so, please provide information regarding what has been approved. If not, please indicate the anticipated date by which such approvals will be finalized.

(3) Do the criteria for these containers for transporting liquid high level radioactive waste differ from the criteria for the containers for transporting solid high level radioactive waste (i.e. irradiated nuclear fuel rods)? If not, what is the basis for determining that the same criteria will be adequate? If there are differences, please specify the criteria for each type of container.

I look forward to receiving the specific information of public interest requested in this letter. Thank you, as always, for your time and attention to these matters.

Yours very truly,



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P.S. You stated in your posting on the CNSC web site that my article in Le Devoir of August 9, 2013, used "the tragedy of Lac Mégantic as an opportunity to fear-monger." This is misinformation. There was no mention whatsoever of Lac Mégantic in my article in Le Devoir. See <http://tinyurl.com/msy2op2>.

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cc. Joe Oliver; Thomas Mulcair; Justin Trudeau; The Gazette; Le Devoir.

