

Protecting Present and Future Generations: Reaching Agreement on Cleanup Criteria

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Thank you for inviting me to your workshop. It is my first visit to your country and I can assure you, because of the hospitality I have experienced here it will not be my last.

By way of background, my municipality, located one hour east of Toronto, contains one of the world's oldest nuclear facility sites. From the 1930s through to the 1970s, processing residues from radium refining facilities located at the Port Hope Harbour were being stored and/or deposited on numerous sites throughout the municipality. For a variety of reasons, including spillage of material during transportation and unmonitored or unauthorized diversion of materials, many private and public properties in the municipality were contaminated with low level radioactive waste. There are about 14 major licenced and unlicensed contaminated sites and hundreds of small scale site (for example residential properties) in the urban area of our community.

Over the past 30 years, the community has demanded that the nuclear industry and the federal government clean up the mess left in Port Hope. The federal government sought to fulfill its commitment to clean up over one million cubic metres of contaminated material remaining in Port Hope but was unable to find a solution. Some of you may be aware of the Low Level Radioactive Waste Management Siting Task Force and its failure to find a home for historic LLRW in the 1980s and 1990s. It is only within the past 6 years that we, as a community, began to see the "light at the end of the tunnel". And, the light began to shine when the communities took the issue by the horns and proposed possible solutions to the federal government; the long term management of the material in their communities. The Port Hope Area Initiative was then launched by the federal government to obtain the environmental assessment approvals and licencing for the cleanup of Port Hope. This then is a community based initiative.

Although there are many ingredients to success and numerous potential pitfalls in siting a LLRW management facility, today, I'd like to focus on one critical component of the Port Hope Area Initiative: reaching agreement on cleanup criteria. I will address:

- the principles for the development of cleanup criteria and how they were agreed to
- where compromises were made
- the influence of volumes, cost and disruption to residents in moving toward agreement

- a ‘package’ approach for acceptance

So the Port Hope Area Initiative (PHAI) is unique in that it emerged from community proposals to assist the federal government in fulfilling its commitment to clean up contaminated sites and to provide better long term management of the Low Level Radioactive wastes in the community. We see ourselves as partners in the environmental assessment and licencing process.

A legal agreement negotiated between the federal government and two municipalities is the critical implementing instrument for the cleanup process. The Initiative is comprised of two projects: the Port Hope Project for a cleanup in the Municipality of Port Hope and the Port Granby Project to address contaminated wastes in Clarington. The legal agreement, among other things, establishes the goal of the cleanup of remediation sites and for other industrial sites and the proposed waste management facility sites.

As the Mayor of Port Hope with over 17 years on Council, and a life-long resident in the community, I have a unique perspective about the current Environmental Assessment process to clean up the waste, and the events that precede it.

My Council must ensure that the decisions we make today about this project protect not only the health and needs of current residents and the natural environment, but also the health and needs of future generations. This Council will be remembered either as the Council that “got it right” when it came to the cleanup, or as the Council that failed to protect the interests of its present and future citizens. A key requirement for leaving a positive legacy is that the waste be cleaned up from the contaminated sites so that the sites can be used for all unrestricted future uses. In 25, 50 or 100 years the Municipality, its residents or business owners should not be burdened by new regulatory requirements or real or perceived health risk because regulations that governed this project in 2005 became more stringent in say 2030.

The development of cleanup criteria (how clean is clean?) has been difficult. For each attempt to find a solution to the contamination in Port Hope over the past 20 years, agreement has not been achieved on the cleanup criteria. For this current Project, Port Hope Council and staff, together with the Municipality of Clarington, collaborated with the Government of Canada, through its Low-Level Radioactive Waste Management Office (LLRWMO) to develop a set of cleanup criteria. The basis of the discussions was to be a Cleanup Criteria Discussion Document, a technical document prepared by the federal proponent based on a risk assessment model and guided by the current regulatory regime in Canada and internationally. That document was sent to our peer review team for a technical review. However, we did not see the development of cleanup criteria as solely a technical matter. In fact there was agreement early on in the process that it was a socio-political matter as well.

The initial approach to the discussions put forward by the proponent was to look at the application of cleanup criteria on a site by site basis. The discussions on the proposed criteria centred around the volumes of materials that would be generated at each remediation site with cleanup criteria recommended by the proponent and the total volumes of material under a few alternative scenarios. It became apparent that we were each interpreting the Legal Agreement differently, in particular the section that states that the remediation sites should be cleaned up “so that all such properties will be able to be used for all current and foreseeable unrestricted uses”. Initially, the federal government proponent interpreted “foreseeable” to mean land uses as depicted in the current official plans of the municipalities (which are reviewed every five years and have up to a 20 year horizon). We, in the Municipality, understood it to mean the long term future – hundreds of years down the road. There was considerable discussion on the meaning of these terms. And, I believe, the federal government approach was to clean up to safe levels as specified by current regulations for the different land uses as designated in the current Official Plan.

For some remediation sites, the proponent wanted to apply less stringent criteria because they were designated as industrial in our Official Plan and based on their belief that the sites would not be used for the most sensitive uses – agricultural, residential or parkland. One example is the future use of the lands under the railway viaducts. The proponent’s approach was to apply cleanup criteria for industrial lands here. We have seen in other cities the re-routing of railway lines away from the core area. We believe that in the next 50 or 100 years these viaducts may no longer serve as part of a railway corridor through our downtown. The real break-through in our discussions came when we stated that we could see these lands being used for community vegetable gardens within the next 20 or 30 years, and that these lands needed to be cleaned up for such sensitive uses. This helped the proponent to understand the changes we can see coming to our community over the next generation or two and how we want our community to grow.

We also understood the statement from the Legal Agreement “used for all current and foreseeable unrestricted uses” to mean a cleanup to background conditions. And, some federal politicians stated upon the signing of the Agreement in 2001 that Port Hope would again be “pristine”. Through our discussions with the proponent over the past 3 years we now understand that a cleanup to this level is, for Port Hope, a very large and expensive proposition. One that would require the removal of an estimated 3.5 million cubic metres of material – about 350,000 truck loads of contaminated material through the community and almost as many trucks of clean fill returning on our streets.

After a number of meetings when tensions were rising and frustrations set in, we stepped back and reiterated our basic goals and desires – that the cleanup must protect current and future human and environmental health and the cleaned up sites must be available for “all current and future unrestricted uses”. We then introduced the notion of a set of principles that could guide the development of the cleanup criteria.

After a series of meetings and some lengthy discussion, the text of a set of principles took form. The text was edited and the wording re-examined a number of times by the group

until an agreeable set of principles emerged. These principles are intended to guide the development of cleanup criteria. They are a key aspect of this project. These principles are intended to guarantee that, among other things, the contaminated sites will be cleaned up so that the current and future owners can use their properties for any use, such as housing, vegetable gardens, play areas, and other recreational uses.

One very difficult moment occurred after agreement had been reached on every word in the Principles statement but prior to it being made public as a draft for public comment. Staff with a lead federal government department reviewed the principles and requested changes to them. We disagreed! It was our position that the decision makers were at the table with us, or should have been, for the many hours of meetings to agree on the wording and meaning of the principles. We and the federal proponent (the Low Level Radioactive Waste Management Office) refused to accept any further changes to the document. We were confident that it would garner the public support needed. And, we were vindicated. There has to my knowledge been only positive public comment on the Principles.

The General Principles ensure that the sites are cleaned up in accordance with the Legal Agreement. We agreed that there could be a few Special Circumstances; sites that are unlikely to ever be used for residential, farming or parkland uses. These could include a remediation site located adjacent to a municipal landfill, a portion of a particular roadway and the non-radioactive contaminated industrial sites.

The cleanup of the harbour is also considered a Special Circumstance. However, although cleanup criteria were developed by the proponent that the federal government considered to be safe, they were unacceptable to us – the Municipality – because the remaining sediment would require special handling in the future after the clean up if dredging of the harbour was required. The proponent agreed that the Municipality of Port Hope should not be burdened by such future costs and has now proposed to remove all sediment from the harbour to ensure that no contamination remains. I believe that this demonstrates an important aspect of this project – the proponent may make plans that they feel are safe but they are willing to respond to Municipal interests and at times fully agree with our position.

Principles for the Development of Cleanup Criteria

The following Principles set the policy direction for development of clean-up criteria. The Principles are to be considered to be comprehensive, mutually reinforcing, and intentionally linked. No individual principle may be considered separately. This was an important point – all of the General Principles were to apply together. All of the Principles had to be satisfied for the cleanup criteria to be acceptable. (A full listing of the Principles with additional explanation for each is available.)

General Principles

There are six General Principles:

1. **Properties contaminated with historic low-level radioactive waste shall be cleaned up to permit full enjoyment and use of these properties. Such uses include vegetable gardens, play areas, recreational uses and home construction;**
2. **Cleaned up properties can be used for all current and foreseeable unrestricted uses.**
3. **The Legal Agreement shall be adhered to throughout the development and application of clean-up criteria for the Port Hope Area Initiative.**
4. **Clean-up criteria shall meet or exceed the requirements of Canadian regulators (e.g., Canadian Nuclear Safety Commission, Ontario Ministry of Environment, etc.).**
5. **Consultation with the public, the municipalities, and federal and provincial agencies shall be conducted during the development of clean-up criteria.**
6. **Clean-up criteria shall consider all pathways to human health and the environment.**

Specific Circumstances

Under the general principles, the following five specific circumstances shall be considered, for example:

1. **Specific cleanup criteria will be developed to reflect anticipated (foreseeable) future land uses for certain properties within the scope of the Port Hope Area Initiative** – where there is agreement that the properties will not be used for the most sensitive uses such as residential, parkland or agricultural uses.
2. **Clean-up criteria for the inner basin of the Port Hope harbour will be developed so that future dredging activities will not be affected by historic low-level radioactive waste.**
3. **Clean-up criteria shall reflect special groundwater circumstances.**
4. **The Port Hope and Port Granby Waste Management Facilities shall continue to be monitored and will remain under the care and control of Canada for the long-term (i.e. hundreds of years).**

5. **Designated industrial waste in Port Hope will be cleaned up in accordance with Schedule 1 Part B of the legal agreement between Canada and the municipalities.** That Schedule basically says that the non-LLRW industrial sites will be cleaned up to the satisfaction of the Ontario (provincial) government Ministry of the Environment.

Here again I think is an example of where the technical approach, on its own, could not achieve a successful conclusion. The scientific / technical approach to the development of the cleanup criteria is a necessary step – to ensure, at a minimum, that the criteria protect human and environmental health and are acceptable to the regulators (the Canadian Nuclear Safety Commission and the Ministry of Environment). But I want to be clear, Council has always assumed that the project would not proceed unless the Canadian Nuclear Safety Commission approved the criteria; that would be the minimum level of cleanup. But the community expected more. The community and Council wants assurance and confidence that the cleanup of Port Hope will stand the test of time. That if regulations become more stringent over the next 50 years, the cleaned up sites will still be considered to be clean and no additional cleanup will be required. The federal position appears to be that cleanup to background can not be achieved due to cost, additional management requirements, and more extensive disruption to the community. We acknowledge the importance of these considerations.

Next Steps

The cleanup criteria are to be developed based on these principles. Council's role in the next few months will be to ensure that the criteria for the cleanup reflect the principles, and in turn reflect the community's needs and desires. We, in the municipality, understand that the costs and the disruption to our residents will be greater as the volumes of material to be remediated increase. However, we want to ensure that future use of the properties is not compromised. What we have agreed to in the Principles is that there may be a few circumstances where the property may never be available for sensitive uses (e.g., residential / gardening) and so it may be feasible to cleanup to less stringent, but still safe, criteria with less material to be excavated.

Through these discussions and the recently expressed skepticism of the Canadian regulator among some residents, we understand that the criteria alone will not provide the Municipality or the community with the confidence required for acceptance. We see the cleanup criteria themselves as a part of a larger package of criteria, prescribed actions and responsibilities that will give confidence to me, my Council and my community that the cleanup of contaminated sites will protect human health, not only for the near future but also for generations to come and will allow the cleaned up sites to be available for "all current and foreseeable unrestricted uses".

We have only now begun to discuss with the federal government what that 'package' may look like but it is likely to include:

- A set of cleanup criteria
- The process or method of applying the criteria
- The definition and process for applying ALARA (As Low As Reasonably Achievable)
- Verification of the cleanup (protocols and regulator oversight)
- Municipal Monitoring and oversight (audit)
- Backfilling of each site with clean fill
- Municipal concurrence for each special circumstance (expected to be few)

I would like to add a few thoughts about ALARA. Although ALARA will be prescribed by the Canadian Nuclear Safety Commission (the regulator), the municipalities are looking to ALARA for that additional assurance that the criteria will be sufficient for the “foreseeable unrestricted use” and will achieve the principles in the short and long term. For us, ‘social and economic considerations’ under ALARA is interpreted to mean achieving community acceptance at an acceptable cost to the federal government.

In conclusion the Cleanup Criteria for the Port Hope Project must be part of a package that:

- Must protect human and environmental health now and in the future
- Must be approvable by the CNSC and other agencies (Ontario)
- Must achieve the Principles for the Development of Cleanup Criteria and;
- Must be acceptable to the Municipality and the community

We are not there yet. We have made tremendous progress with the Principles. We are hopeful that we can achieve agreement on a package of cleanup criteria, protocols and procedures for undertaking and managing the clean up.

Thank you.

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