CANADIAN ENVIRONMENTAL LAW ASSOCIATION
L'ASSOCIATION CANADIENNE DU DROIT DE L'ENVIRONNEMENT

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May 31, 2011

Re: Comments on Plutonium Tower Decommissioning at Chalk River Laboratories - Registry reference number **04-01-6513**

Dear Ms. Watt:

The Canadian Environmental Law Association writes to provide its comments in relation to the Draft Screening Report regarding above referenced Plutonium Tower Decommissioning Project at Chalk River Laboratories. The comment period was extended to May 31, 2011.

**Consultation and Notice**

The first issue of concern to CELA is in relation to the adequacy of consultation with and notice to the public. In the consultation plan as proposed and as carried out, there was no notice or attempt at consultation that would bring this project to the attention of the public or public interest groups beyond the local area surrounding Chalk River Laboratories. However, the Plutonium Tower and related facilities are contaminated sites of global significance given their history and the types of contamination contained. Appendix B to the EA Study report lists those who were given notice by AECL. Even some of the public interest organizations who previously commented on Chalk River Laboratories decommissioning plans and even on the specific plans pertaining to the Plutonium Tower and other related buildings were not notified. These included for example, Greenpeace Canada and Sierra Club of Canada, according to the distribution list. Given the prior interest of these organizations, this omission is in itself a serious omission. Our organization, CELA, which is often notified of EA proposals also did not receive any direct notice.

CELA also notes that listing on the external AECL website is not in itself sufficient to bring a project to the attention of the broader public without a directed effort to bring it to the attention of the public and environmental communities. The geographically limited notice that was provided is illustrated in the Stakeholder Communication Plan outlined by AECL in 2003; which is essentially the plan that was later followed according to the EA Study Report:

*6. STAKEHOLDER COMMUNICATION PLAN*

*AECL plans to undertake public information and consultation activities to inform and consult with potentially affected stakeholders, including the local public, and other interested parties. Consultation activities will take place in the early stages of the EA Process, to identify public input that may be relevant to the EA Guidelines.*

*Public information and consultation activities will include:*

*I. Letters to the following stakeholders providing them with information on the project and offering individual briefings:*

*a. Elected and appointed municipal officials in the municipalities of Deep River, Laurentian Hills, Petawawa. Pembroke, and Renfrew and Pontiac Counties;*

*b. Federal and provincial elected officials for Renfrew-Nipissing-Pembroke and PontiacIPontiac-Gatineau-Labelle; and*

*c. The Algonquins of Pikwakanagan First Nations community.*

1. *Individual briefings to elected and appointed municipal officials and First Nations Community as requested;*
2. *Presentations to AECL employees and articles in the employee newsletter;*
3. *Notices inviting public comment placed in local newspapers;*
4. *Public information/feedback sessions held at few locations in Renfrew and Pontiac counties;*
5. *Interaction with the media, including interviews and updates on the project.*

*Follow-on public consultation will be conducted to address topics identified during initial public consultation and to provide project updates. The results of the public consultation program will be summarized in the EA Study Report.*

(From AECL Project Description Intent to Decommission Facilities at Chalk River Laboratories at page 14, December 2003)

Furthermore, CELA objects to the apparent practice of the CNSC in providing only very minimal information by way of the internet site of the CEA Registry, and requiring interested parties to request the additional documents from a staff contact person at the CNSC. Firstly this is not convenient and timely, despite the statement that the Registry will provide convenient and timely access to the public. It requires the public to be willing to divulge to CNSC their interest in a project prior to having determined whether they are in fact interested and wish to make comments – since the information provided on the electronic registry is in itself of insufficient detail and context to allow the public to make that determination. Secondly, it is inappropriate to require the public to disclose their interest to the CNSC in any event unless and until members of the public wish to make a comment – this may be intimidating to some members of the public. In CELA's experience, members of the public are often reluctant to contact officials for information unless they feel confident that they have input to provide. Thirdly, despite the fact that the CNSC staff often do provide responses relatively quickly when information requests are sent, which is appreciated, there is nevertheless some delay, even if of short duration, and it may be longer. It also reduces the ability of the public to then follow up once further information requirements become evident. In the event of short comment periods, this can be critical to the public and their appreciation of the context of the proposal. Further, as in this case, when it does become apparent to the public that there are other related projects, there may be insufficient time to

obtain those additional documents from the named staff person so as to be more fully informed as to all of the public information relating to those projects.

Ironically, the following excerpt which tells the public there are three related projects in the instant case, and that Registry files have been established for each, is contained in the EA Guidelines, which themselves had to be requested from the staff coordinator and were not posted on the Internet site!

*A Canadian Environmental Assessment Registry (CEAR) has been established for the assessment, as required by section 55 of the CEAA, to ensure that information is available to the public in a convenient and timely manner. The CEAR consists of two complementary components: an Internet site and a project file. As Federal Environmental Assessment Coordinator (FEAC) for the assessment of the three projects, the CNSC must ensure that records for which it is responsible are included in the Internet site and that a project file containing these records are established and maintained for the duration of the environmental assessment for each of the three projects.*
*The three projects are posted on the CEAR Internet site and information about theses project can be accessed through the Canadian Environmental Assessment Agency home Web page at www.ceaa.gc.ca. The CEAR Internet site numbers for the projects are Plutonium Recovery laboratory 04-01-6503, Plutonium Extraction Tower 04-01-6513 and, Waste Water Evaporator 04-01-6517.*
*As part of the CEAR, CNSC has established a project file on the EA for each of the three projects containing all the records used for each of the EAs. Interested parties may obtain copies of specific records on the list from the Document Contact at the CNSC (see section 12.0).* (Page 6 of the EA Guidelines)

**Context for this Project**

The Draft Screening Report was woefully inadequate in describing the project, and in particular in describing the context of the Project including its history. This is regrettable since the history is for the most part otherwise available in documents that CELA and other interested Interveners were able to eventually piece together in reviewing this project. It did not serve the public or the causes of transparency and provision of opportunity for meaningful comment, to leave this information out of the only document posted to the CEAA Registry, i.e., the Draft Screening Report.

The Plutonium Tower was an integral part of Cold War era efforts to produce plutonium for atomic weapons. It was part of efforts in conjunction with Britain to build Britain's nuclear weapons arsenals and nuclear power programs. As advised by Gordon Edwards,

> *The Plutonium Tower is part of Building 223, which was erected sometime around 1948 to allow the British scientists attached to the Chalk River Project to chemically separate plutonium from irradiated nuclear fuel produced by the NRX reactor. It is a pilot reprocessing plant. Plutonium is obtained by chemically separating the irradiated fuel in acid, producing high level radioactive liquid waste containing the fission products, and then chemically separating the plutonium from that acidic solution and sending it to England for converting it into a metal. The first plutonium metal in England was produced in 1951, using plutonium from Chalk River.* [1]

[1] Personal communication, Gordon Edwards, May 18, 2011

**Need for Panel Review**

CELA submits that this project must be combined with related projects and referred under the CEAA for a Panel Review.

Decommissioning of the Plutonium Tower, Building 223 is a Project within the definition of CEAA and its regulations and there are no exclusions in the Exclusion List Regulations (as per AECL EA Study Report). This is true of several other projects anticipated at the Chalk River Laboratories site which are closely related. This project must be placed in context with the other projects. In addition to the broader decommissioning of Chalk River Laboratories which should be subject to an EA and Panel Review, it is especially appropriate that decommissioning of Buildings 220, 223 and 228 should be reviewed together as was suggested in the AECL project description in the first place. In addition, these projects must be assessed along with potential long term plans for the waste such as the potential for a Deep Geological Repository which has been posited by AECL as a possibility in the past.

We note that AECL itself suggested a single project description to deal at least with these three buildings in the 2004 cover letter to CNSC accompanying the December 2003 suggested project description for the Plutonium Recovery Laboratory; the Plutonium Tower and the Waste Water Evaporation Buildings. CNSC EA Guidelines indicate that since they are physical works, they are three separate projects (i.e. their decommissioning). However, nevertheless they should be assessed together, including a comprehensive process of public consultation and then subjected to a Panel Review in their coherent context. The three most related buildings were described in the EA Guidelines document as follows:

- The Plutonium Recovery Laboratory building, constructed in 1947 and in operation from 1949 to 1957, was designed to extract plutonium isotopes from enriched fuels. Radiation levels vary from low to very high and decommissioning is expected to commence over next 10 years. It will include an interim phase of a minimum of 10 years of monitoring the central concrete building according to the EA Guidelines document.

- The Plutonium Tower Building was used to develop methods to extract plutonium from fuel rods irradiated in the NRX reactor. It operated from 1948 to 1950. The building was permanently shut down in 1954.

- The Waste Water Evaporator Building, constructed in 1952, was used to process and treat radioactive liquid wastes produced through the NRX fuel reprocessing work conducted between 1952 and 1958. Some evaporation activities were also sporadically carried out between 1958 and 1967 to concentrate about 450 m3 of stored process wastes remaining from earlier fuel processing. The facility was shut down in 1971.

- In respect of the Waste Water Evaporator Building, the EA Guidelines document indicates an expectation to initiate decommissioning within 10 years following regulatory approval. There is also contaminated soil to remove as there may be in respect of the other related buildings.

Interestingly, the EA Guidelines document did set out a statement calling for assessment of three projects

> *in a concurrent and parallel environmental assessment process. The intent is to relieve the administrative burden on both the licensee and the CNSC while complying and conforming with the requirements of both the CEAA and CNSC EA policies and practices, and maintaining high quality EA without compromising stakeholder participation in the EA process*[2].
> (See Page 4 of EA Guidelines.)

CELA submits that this is not the process which has been followed in the event, and the intended benefits of maintaining high quality EA and ensuring strong stakeholder participation have not been achieved. For example, Notices of Commencement have been posted on the CEAA Registry for the Waste Water Recovery facility and the Plutonium Recovery Laboratory. However neither of these projects has had Draft Screening Reports posted nor calls for public comments as yet. Other projects at Chalk River Laboratories have also been posted, as Screening level EAs and they should also be considered together with the Plutonium Tower and these other related buildings. These include projects such as the proposal to decommission the NRX Ancillary Buildings, upgrading of liquid effluent monitoring stations, and a proposed treatment system for groundwater treatment of a Strontium 90 groundwater plume.

Furthermore, the Draft Study Report which was posted for comment failed to provide sufficient context, failed to describe the related projects, and failed to adequately facilitate ready access to documents regarding the related project Screening EAs. As this was the document initially provided to the public via the CEAA Registry and is the document upon which public comment is sought, there is a significant shortfall in meeting the objective of providing a concurrent and parallel environmental assessment process for the three most closely related projects. CELA submits that the notice to the public and the

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[2] *(Further excerpt from the EA Guidelines at page 5:*
*As stated above, it has been determined that the three AECL proposals, the decommissioning and demolition of the Plutonium Recovery Laboratory, the Plutonium Tower and the Waste Water Evaporation buildings, are considered as three separate projects for the following reasons:*
*• Each proposal could proceed independently, in other words any one of the three facilities could be decommissioned separately from the other facilities; and,*
*• While the three facilities are physically located close to each other, they are not considered to be linked in terms of function, process or purpose in their current state.*
*As a result, a decision to proceed with the decommissioning of any one of these facilities does not make the decision to proceed with the decommissioning of the remaining facilities inevitable.*
*AECL has also indicated that the decommissioning of each of the facilities will be scheduled based on business, health and safety and resource considerations. Accordingly, each proposal is considered a distinct project.*
*Assessing several CEAA projects concurrently and in parallel under a single EA process will result in a more efficient and timely process. Efficiencies will be achieved by eliminating duplication of certain EA process steps described in section 10 of this document.*
*The environmental assessment process outlined in the CEAA, including the application of sections 15, 16, 20, 38 and 55 of the CEAA, will remain project-specific and be reported as such in the licensee's EA Study Report and the CNSC's EA Screening report.)*

provision of information to allow the public to understand the project and provide meaningful comment have been deficient in this case.

AECL indicated in its EA Study Report that the project is not prescribed in the Comprehensive Study regulations, and that it was not aware at that time of any

> *environmental effects or public concerns associated with this project that would warrant a need to have it referred to a mediator and a review panel pursuant to Section 25 of the CEAA.*
> (See EA Study Report Page 2-1)

However, the public consultation, as indicated earlier in this submission, was inadequate, especially given the history of this site, the related projects, the context of those projects and future decommissioning activities and the previous examples of significant public concern which have been expressed to the CNSC and AECL, such as by the Durham Nuclear Research Project, Greenpeace and Sierra Club of Canada among others. To plan for, and provide only very local and restricted notice was insufficient. Therefore AECL does not have a basis to say that it is not aware of public concerns that would warrant referral to Panel review.

As a Crown agency, and with delegated responsibility to prepare the EA Study Report on which the RAs would base their screening report, the onus is on AECL to ensure the thoroughness of its public consultation, as well as its environmental effects analysis. This onus was not met in this case as AECL improperly curtailed the extent of its public consultation.

Similarly, the limitation of the project to Building 223 only, also inadequately curtails the project and its description of environmental effects. For example, Figure 3-1 – should show the location of building 220 and 228 in relation to building 223 – and what are the effects of decommissioning Building 223 on the surrounding buildings and activities. As noted in the EA Study Report[3], there are 12,000 m3 from related projects of concrete waste and CELA submits that it is necessary to consider all of the projects together. Only 250 m3 of this volume is in relation to the Plutonium Tower. There is a significant context to consider what other radioactively contaminated concrete and other radioactively contaminated building materials will be generated in decommissioning activities at CRL. In addition to buildings 220, 223 and 228, a Panel Review and consolidated EA review should include the following other facilities which are planned for decommissioning:

- NRX Ancillary Buildings,
- Buildings 204A and 204B Fuel Rod Storage Handling Bays,
- Decommissioning of the NRX Complex

**Alternative Means**

The EA Study Report indicates that alternative means are limited to, firstly the time frame for decommissioning and secondly, the methods of decommissioning. However, CELA notes that if there

[3] page 4-10 of EA Study report

was a comprehensive study or Panel review inclusive of the related projects and future projects as discussed above, a broader range of alternative means would likely be considered.

One alternative not considered was the Do Nothing alternative. This should be the benchmark against which the other alternative means are considered.

In terms of the alternative means that were considered, CELA has significant concern about the statement in the EA Study Report that the concrete may be "rubbalized" and screened to meet clearance or release levels[4]. CELA disagrees with an approach that attempts to clear or release the radioactive concrete in any portions of the Plutonium Tower to anything but an appropriate radioactive waste management facility.

CELA also disagrees with the potential for clearance of waste from the wooden annexes of the Plutonium Tower.[5] None of it should be cleared for general release, recycling or scrap to be re-used.

Similarly in its 2006 Preliminary Decommissioning Plan for the CRL site, AECL noted in general that

> *These wastes will be managed according to established AECL procedures and in accordance with all applicable federal and provincial regulations. Where possible, equipment and materials will be re-used for other applications within AECL or offered for recycle or scrap value through established channels such as Crown Assets.*(AECL 2006 page 46).

CELA repeats its submission that none of the Plutonium Tower or Annexes waste should be sent for recycling or scrap in any manner.

In terms of selection of the preferred alternative, there is no traceable basis in the EA Study Report for the stated preference of assessment and segregation of waste after removable; versus assessment and decontamination in situ (see page 4-11). Although advantages and disadvantages of each are briefly listed, they are not compared or weighted in a traceable way as to why the one is preferred over the other. This is contrary to the EA Guidelines which required that

> *Any decommissioning plan (conceptual, preliminary or detailed) relative to any of the three projects, if available, will be assessed as part of the scope of project. These plans will document the preferred decommissioning strategy and provide a justification regarding the preferred strategy relating to waste management.* (Page 13 of the EA Guidelines)

Although the Draft Screening Report, at page 12, did provide a stated rationale for selection of one over the other: the presumed availability of a site to manage the wastes together with the larger other waste to be generated at the CRL facility from other buildings in the future; and ease of characterization in a separate facility and reduced risk of accident and uptake of radioactive materials, it is not clear where or from who this rationale was obtained. AECL should have provided a traceable rationale for its stated preference.

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[4] See page 4-11 of EA Study report

[5] page 4-17

An additional issue is that of prematurity in terms of choosing a preferred alternative means of decommissioning the concrete plutonium tower portion of the project. Since the time frame for this activity is far in the future (for example the date 2027 is mentioned in the EA Study Report) in relation to the Plutonium Tower concrete, it is premature to select a preferred alternative at this time. In fact the EA Study Report indicates that *at the time of this writing* one alternative is preferred over the other, implying that this choice may change.

**Waste Streams and Handling**

There are significant questions remaining regarding where the waste streams from the decommissioning project are going and where they are to be secured in the meantime. These issues are treated as speculative possibilities in both the EA Study Report and in the Draft Screening Report.

The EA Study Report indicates the possibilities of transfers to the Millers Road Landfill and Chalk River Inactive sites for conventional waste, and CRL WMA H for radioactive waste, in relation to the waste streams from the three related buildings.

CELA expresses its concern over terminology contained in the AECL Project Description, that of *nominally* clean waste. There is no definition of *nominally clean* (see AECL project description 2003) but the Project Description states that waste which is nominally clean may go to approved landfill or to be reused. Assuming that this term refers to the clearance standards, this issue was addressed above in regard to it being an inappropriate approach to dealing with the waste from the Plutonium Tower and the related buildings.

CELA notes that it would appear that at present there is a lack of current facilities to characterize and handle the concrete waste that will be generated from the related buildings and projects (and this is part of the reason for delay in proceeding to dismantle the concrete tower). This is one more reason that a review of the related projects must be conducted together; and that there should be a Panel Review for the whole facility. In addition, given that the plan as proposed is to not dismantle the tower until 2027 or so, there is certainly time to conduct a proper comprehensive review and EA with appropriate descriptions of all of the related projects and proper public consultation.

One question that has arisen is whether AECL is considering a proposal for a deep geological repository at the Chalk River facility. If so, this must certainly be made public, with thorough public consultation at an early stage, and if the Plutonium Tower decommissioning and related projects are intended to eventually be deposited in such a facility, this is a relevant factor which must be understood now when the current licence application and EA is under consideration.

**Other Issues – Effects Assessment**

The EA Study report discusses the intent to return the land for re-use by CRL “consistent with its location in Controlled Area 2”. A discussion should be included in the EA Study Report as to what uses are allowed in this zone within the CRL site. Controlled Area 2 is defined as (CA-2) Areas where the predominant hazard may be either external and/or internal. (AECL 2006)

The EA Study Report and Draft Screening Report refer to existing radiation control and worker safety programs but fail to specifically delineate how risks to workers during the decommissioning stages would be sufficiently understood and controlled.

The EA Study Report provides some information as to hydrology, but fails to specifically describe the flows of radioactive materials in the hydrological system, what is monitored, how radioactive contaminants in hydrological streams would be treated, and what contingencies would be needed to ensure no adverse impacts to downstream and off-site biota or human health.

In the AECL 2006 preliminary decommissioning plan, a statement is made that liquid waste will be treated and monitored and released to the Ottawa River (for example from building 228). The EA should describe how such liquid waste is treated; how effective such treatment is; what radioactivity is released to the environment; and whether it is or is not treated if it meets the current Canadian Drinking Water Guidelines and Ontario Drinking Water Standards. The EA should also describe whether and how it would meet more stringent standards in the future. For example there is a proposed 20 bq per Litre standard for Tritium recommended for Ontario by the Ontario Drinking Water Advisory Committee; and whether and how it would meet a possible groundwater standard of 100 bq per Litre for tritium which the CNSC is considering for public consultation this spring. Other standards for radioactive nuclides in drinking water or groundwater may similarly become more stringent over time.

Mention is made of a groundwater plume of Strontium 90 (see page 40 of the AECL 2006 preliminary Decommissioning Plan) and “Pump and Treat” and “Wall and Curtain” are two approaches currently in use for groundwater plumes such as the Strontium 90 plume. The EA should include a description of the need for ongoing interception of the Strontium Plume in conjunction with the other decommissioning projects required at CRL both as part of the overall description of decommissioning at the CRL site as well as in the cumulative effects analysis.

The EA Study Report notes that there may be secondary liquid waste such as from concrete cutting which may become contaminated with radioactivity (See page 4-19) which may be required to be treated and released. Again the EA Study Report should describe what is the treatment method to be used, how it is to be monitored, what levels of radioactivity would be released to the environment, and whether those treatment methods would be able to meet more stringent standards in the near future.

Since the EA Study Report indicates that the wooden Annexes to the concrete plutonium tower present a fire hazard, it may be that their earlier removal is supportable with appropriate safeguards and waste handling, but this should not be done in a context in which the decommissioned materials are cleared or released; rather they must be retained under regulatory control in appropriate waste handling facilities. Furthermore, this activity should not proceed until there has been a Panel Review and a review of this project in context with the related projects as described elsewhere in these submissions.

The EA Study Report prefers the option of deferring removal of the concrete tower portion of the Plutonium Tower to a future date when a facility is available to take the concrete waste of not only the Plutonium Tower, but also concrete waste from other facilities at CRL. 2027 is posited as a potential date when this waste would be handled following decommissioning of the Plutonium Tower and these additional facilities. This decision should await a comprehensive Panel Review. As submitted earlier, it is premature to issue an approval as to the preferred alternative means for this aspect of the project until a comprehensive EA including appropriate cumulative effects analysis is conducted.

CELA also notes that there is an urgent need for an additional waste category for non-fuel high level radioactive waste - for example for wastes with long-lived plutonium isotopes. It is not appropriate to categorize these wastes as Intermediate level waste simply because they are not fuel wastes.

**Follow Up Program**

CELA disagrees with the conclusion as to a lack of need for a Follow Up program as per the AECL EA Study report. A follow up program is essential, particularly since the plutonium tower itself is intended to remain in shutdown and surveillance state for many more years.

Furthermore, a follow up program should deal with radioactively contaminated dust suppression, containment and control, transport of all wastes, water contamination possibilities; as well as with waste characterization, ensuring no clearance or release is applied to any of the waste streams from the Plutonium Tower decommissioning, and that there is sufficient monitoring as to interim or long term waste handling.

**Cumulative Effects Assessment**

CELA disagrees with the conclusions of the cumulative effects assessment. The EA of this project did not properly evaluate the cumulative effects of all of the decommissioning activities, including those buildings closely related to this project. Furthermore the cumulative effects analysis did not meet the requirements spelled out in the EA Guidelines. The EA Guidelines required the following:

> *The effects of the project must be considered together with those of other projects and activities that have been, are, or will be carried out, and for which the effects are expected to overlap with those of the project (i.e., overlap in same geographic area and time). These are referred to as cumulative environmental effects. An identification of the specific projects and activities considered in the assessment of cumulative effects will be included in the Screening Report. The assessment of cumulative effects will include consideration of past, current and future projects carried out within CRL property boundaries. The cumulative effects assessment will also consider the combined effects of the project with the neighbouring or regional industries and other developments. The information available to assess the environmental effects from other projects can be expected to be more conceptual and less detailed as those effects become more remote in distance and time to the project, or where information about another project or activity is not available. The consideration of cumulative environmental effects may therefore be at a more general level of detail than that considered in the assessment of the direct project-environment interactions. Cumulative effects relating to the adequacy of existing CRL waste management facilities and local and regional landfills to accommodate waste generated from the three projects in combination with other AECL waste generating projects will require assessment. Cumulative effects assessment will also take into consideration the potential impacts of these projects on local and regional landfill sites. Where potentially significant adverse cumulative effects are identified, additional mitigation measures may be necessary.* ***The above must be completed on a project-specific basis meaning that the above methodology for assessing cumulative effects must be completed and documented separately in the EA Study Report for each of the three projects.*** (EA Guidelines; emphasis in the original, Page 18)

The EA Study Report did not carry out a cumulative effects analysis at this depth. Rather a cursory review summarily dismissing the potential for cumulative effects was provided. (See Page 7-1 of the EA Study Report.) This means that the CNSC cannot properly assess cumulative effects as a result of this serious deficiency in the analysis. In addition, this means that the CNSC also cannot appropriately determine the need for a follow up program as a result of the absence of a credible cumulative effects analysis.

**Costs**

There is little to no discussion of costs of decommissioning and the impact of cost issues on the choice of timing of the proposed Plutonium Tower decommissioning project. It is clear from other documents such as the AECL 2006 preliminary decommissioning plan for the CLR site that costs will affect the timing and choice as to which projects will proceed and in which order. Costs should be discussed in this EA, but should be also included in an overall Panel review of the entire Chalk River Laboratories decommissioning plans.

In its 2006 preliminary decommissioning Plan, AECL estimated that

> *The cost for decommissioning AECL's Chalk River Laboratories as presented in this document has a Net Present Value (NPV) $1.97 Billion* (AECL 2006 page 50).

The costs associated with the Plutonium Tower Decommissioning should have been articulated in the EA Study Report along with the impact of various choices such as timing.

Costs were also discussed by AECL in their 2006 preliminary CRL decommissioning plan as depending in part upon the determination of clearance levels for radioactive materials (see Page 6 AECL 2006). CELA again repeats and submits that none of the radioactively contaminated waste or decommissioned material that is the subject of this application should be subjected to clearance levels and released beyond waste management by CRL in appropriate waste facilities subject to CNSC licensing and oversight.

Costs are also relevant to this EA given that funding for the project is from Natural Resources Canada through its Nuclear Legacy Liability Program. AECL states in its 2006 decommissioning plan for CRL that the federal government has guaranteed decommissioning liability costs for the site.

**Prior Public Submissions**

We would also note that as outlined in the summary of public comments contained in the EA Guidelines, a number of these points such as the need for an overall Panel review of CRL decommissioning plans; the need to avoid fractured review of ad hoc projects at the CRL site; the need for disclosure and transparency; the need for proper consultation; and the costs of the project, among others, have been made repeatedly in the past by other ENGOs both as to this specific project and related projects and as to the preliminary overall CRL decommissioning plan. Many of these points were rejected in the EA Guidelines as issued, but their continued importance is reinforced by the confusion and difficulty that Interveners interested in the current proposal have now had in obtaining information and in appreciating the context for this proposal.

To make matters worse, the current EA is even more fragmented than the contexts in which other participants made such comments where for example, the three related buildings numbered 220, 223 and 228 were described in one project description.

It appears to CELA upon a review of the documentation, that AECL initially proposed that the related projects be considered together. This seems to have been the intent of the EA Guidelines as well. However, presently, by separating the Environmental Assessment for the Plutonium Tower from the other related projects, preparing a Draft Screening Report relating only to the Plutonium Tower, and calling for comments upon that project alone, the goals of healthy public consultation, full public disclosure and high quality EA have been defeated.

**Conclusion**

The CNSC is obliged to conduct the EA in accordance with the purposes of the *Canadian Environmental Assessment Act*, as well as with the duties provided in section 4 of that Act:

Purposes

**4.** (1) The purposes of this Act are

(*a*) to ensure that projects are considered in a careful and precautionary manner before federal authorities take action in connection with them, in order to ensure that such projects do not cause significant adverse environmental effects;

(*b*) to encourage responsible authorities to take actions that promote sustainable development and thereby achieve or maintain a healthy environment and a healthy economy;

(*b.1*) to ensure that responsible authorities carry out their responsibilities in a coordinated manner with a view to eliminating unnecessary duplication in the environmental assessment process;

(*b.2*) to promote cooperation and coordinated action between federal and provincial governments with respect to environmental assessment processes for projects;

(*b.3*) to promote communication and cooperation between responsible authorities and Aboriginal peoples with respect to environmental assessment;

(*c*) to ensure that projects that are to be carried out in Canada or on federal lands do not cause significant adverse environmental effects outside the jurisdictions in which the projects are carried out; and

(*d*) to ensure that there be opportunities for timely and meaningful public participation throughout the environmental assessment process.

Duties of the Government of Canada

(2) In the administration of this Act, the Government of Canada, the Minister, the Agency and all bodies subject to the provisions of this Act, including federal authorities and responsible authorities, shall exercise their powers in a manner that protects the environment and human health and applies the precautionary principle.

CELA submits that the CNSC should not proceed with the current licence application. Rather, the CNSC should await the preparation of the detailed EA Study Report for the three related projects, and then refer those three projects along with the overall Chalk River decommissioning plan and all other decommissioning projects to a Panel Review.

In the alternative, CELA submits that the CNSC should determine that public concerns and the potential for significant adverse effects indicate that a Panel review of this project is warranted and should accordingly make that referral. CELA would submit that such a Panel review should be conducted

within a comprehensive context of the project and related projects, and should ensure that at a minimum the cumulative effects analysis includes thorough treatment of the related projects and the overall decommissioning plans, time lines, projects and costs at the CRL site.

Yours very truly,

CANADIAN ENVIRONMENTAL LAW ASSOCIATION
Per
Theresa A. McClenaghan
Executive Director and Counsel

CELA Publication No. 794