

**Environmental Stewardship Council (ESC)**  
**MEETING NOTES FOR MEETING #30 (DRAFT UNTIL ACCEPTED)**  
**Thursday, March 24, 2016 – Best Western Pembroke Inn – Pembroke, ON**  
**List of Participants noted on last page**

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| 9:00 - 9:30 AM  | Refreshments  |
| 9:30 AM<br><br>Safety brief,<br>Welcome and<br>Introductions<br><br>Pat Quinn                                   | Pat Quinn welcomed the council and provided a safety briefing. <ul style="list-style-type: none"> <li>➤ ESC alternate members               <ul style="list-style-type: none"> <li>○ Christine Reavie – City of Pembroke</li> </ul> </li> <li>➤ ESC guest speakers               <ul style="list-style-type: none"> <li>○ Gabriel Blouin-Demers – University of Ottawa</li> <li>○ Dr. Todd Butz – CNL</li> <li>○ Greg Hersak – CNL</li> <li>○ Annie Morin – CNL</li> </ul> </li> </ul>  |
| 9:40 – 9:50 AM<br><br>Review of actions,<br>previous meeting<br>record and new<br>business.<br><br>John Vincett | John facilitated a round table discussion and introduction of all participants.<br><br>He inquired if there were any comments regarding the meeting notes. There were none.<br><br>John then reviewed actions updated since the last meeting in October 2015.<br><br>ESC Action 150617:2 – ONGOING – Decommissioning & Waste Management will update ESC members on Waste Data Tracking System software implementation. Kurt Kehler is responsible for this action.<br>ESC Action 151029:01 – COMPLETE<br>ESC Action 151029:02 – COMPLETE<br>ESC Action 151029:03 – COMPLETE<br>ESC Action 151029:04 – COMPLETE<br>ESC Action 151029:05 – COMPLETE |

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| <p>9:50 – 10:50 AM</p> <p>CNL Business Update</p> <p>Mark Lesinski</p>                          | <p>Mark Lesinski – President &amp; CEO at CNL provided the ESC with a business update on the upcoming Canadian Nuclear Safety Commission (CNSC) hearing scheduled for 2016 April 6. He provided details of new fiscal year plans and explained the proposed change to Manufacturing services at CRL.</p> <p>QUESTIONS:</p> <ol style="list-style-type: none"> <li>1. What is the new licence extension date for NRU?</li> <li>2. Will you continue to produce Cobalt 60?</li> <li>3. You mentioned that CNL would produce revenues of \$58 million; what projects will generate these revenues?</li> <li>4. When will the domestic water line project be complete?</li> </ol>   |
| <p>10:10 – 10:45 AM</p> <p>Decommissioning &amp; Waste Management Update</p> <p>Kurt Kehler</p> | <p>Kurt Kehler – Vice President, Decommissioning and Waste Management at CNL gave an update about decommissioning and waste management activities at Chalk River including the annual summary of CRL volumes of waste. He noted the Nuclear Environmental Stewardship Strategic Outcome and highlighted 2014/15 projects. These projects include the following: decommissioning of 122 buildings with current decommissioning and demolition of building 456 south and central wings as well as buildings 200 and 204. Additionally, upcoming 2016/2017 DWM projects include:</p> <ul style="list-style-type: none"> <li>• Proposed Near Surface Disposal Facility (NSDF) candidate sites and conceptual layout at the preferred site</li> <li>• Integrated waste strategy</li> <li>• Shielded Modular Above Ground Storage 3 (SMAGS) nearly complete</li> <li>• Establishing an Environmental Remediation Framework Agreement</li> <li>• First retrieval and transfer completed at the Fuel Package and Storage Facility (FPS)</li> <li>• Repatriation</li> </ul> <p>Kurt also provided details regarding the CNSC meeting in January related to the NRX Fuel Caddy failure occurrence.</p> <p>QUESTIONS:</p> <ol style="list-style-type: none"> <li>1. East Mattawa Road is the preferred site for the NSDF; where does the water flow?</li> <li>2. In comparing the SMAGS (long term storage facility) with NSDF (disposal facility) what is the safer way to dispose?</li> <li>3. In the caddy failure you mention improving your communication; what is the communication plan and how are you going to go forward with this?</li> <li>4. Are you going to dig up all the NRX accident burials in WMA A?</li> <li>5. What is low level waste (LLW)? Your challenge is to be upfront with the public on what the waste is, what if intermediate level waste (ILW) is discovered? What goes into the facility and how will you determine what goes in?</li> <li>6. Target residue material in the FISST is controversial, any possibility to manage this material onsite, through down blending or cementation?</li> <li>7. How will you disseminate information on your Environmental Assessment?</li> <li>8. What is the process on emergency preparedness in Quebec?</li> </ol> |



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| 10:45 – 11:00 AM   | Bio break   |
| 11:00 – 12:00 PM<br>MODAR Technology<br>Greg Hersak                  | <p>Greg Hersak – Manager with Mechanical Engineering Development (MED) Branch at CNL gave a presentation on MODAR Technology. Modal Detection and Repositioning technology extends the life of CANDU fuels channels by detecting and relocating tight fitting annulus spacers through vibration.</p> <p>QUESTIONS:</p> <ol style="list-style-type: none"><li>1. Who manufactures your pressure tubes?</li><li>2. How often do you have to replace a pressure tube?</li><li>3. What is the life cycle of this tool?</li><li>4. What is the decontamination process for this tool?</li><li>5. How far do the spacers deviate?</li><li>6. What is the magnitude of the vibration?</li></ol>  |
| 12:00 – 12:45 PM   | Lunch   |
| 12:45 – 1:30 PM<br>NPD<br>Decommissioning<br>Update<br>Dr. Todd Butz | <p>Todd Butz – Director of Health, Safety, Security, Environment (HSSE) &amp; Quality Assurance (QA) at CNL presented to the council an update on the decommissioning closure project of NPD. This included the project approach (end state objective, preferred option, licencing), minimizing impact to species at risk and the near-term schedule and work plans based on an in-situ decommissioning strategy.</p> <p>QUESTIONS:</p> <ol style="list-style-type: none"><li>1. Have you considered maintaining the NPD stack for the chimney swifts versus an alternate habitat?</li><li>2. Who is responsible for maintaining the new habitat/s?</li><li>3. Have you considered the end state of NPD to become parkland?</li><li>4. In regards to in-situ decommissioning; do you have a way to verify if the grout gets into all the required areas?</li><li>5. Will you utilize a local cement company?</li><li>6. Where will the grout come from?</li><li>7. What is the Government of Canada’s liability if nothing is done to NPD and is left as is?</li><li>8. What impact would it have on the project if you had to re-consider demolition of the NPD stack and what are the alternatives?</li><li>9. Where in the project timeline is the demolition of the NPD stack?</li><li>10. Will NPD remain licenced once decommissioning is complete?</li></ol> |



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| <p>1:30 – 2:00 PM</p> <p>Quarterly Environmental Performance Report</p> <p>George Dolinar</p>           | <p>George Dolinar - Environmental Program Authority within the Environmental Protection Branch (EPB) at CNL presented the Chalk River Laboratories (CRL) Environmental Performance Summary. The overview included updates on the environmental monitoring program, monitoring updates and an update on current activities. These included:</p> <ul style="list-style-type: none"><li>• ISO 14001 Re-certification Audit (April)</li><li>• National Pollutant Release Inventory (NPRI) submission to Environment Canada (March)</li><li>• 2015 Annual Safety Report (April)</li><li>• Gap Analysis of CSA N288.7 (groundwater monitoring) complete</li><li>• Commercial contract with NB Power to assist with CSA standard updates</li></ul> <p>George also addressed ESC Action 151029:01 and 151029:02 providing information to address and complete the actions.</p> <p>QUESTIONS:</p> <ol style="list-style-type: none"><li>1. The CRL Environmental Performance Report indicated a spike in liquid emissions in February 2014; what caused this?</li></ol>  |
| <p>2:00 – 2:15 PM</p>   | <p>Bio Break</p>  |
| <p>2:15 – 3:00 PM</p> <p>Blanding’s Turtle Research at CRL</p> <p>Gabriel Blouin-Demers/Annie Morin</p> | <p>Gabriel Blouin-Demers – Professor at University of Ottawa and Annie Morin – Environmental Specialist at CNL gave a presentation on the Blanding’s turtle research results at CRL. The data included population size, movement patterns, habitat selection and effects of road mortality as well as future direction to protect the species at CRL.</p> <p>QUESTIONS:</p> <ol style="list-style-type: none"><li>1. What can be done to decrease road mortality at CRL?</li><li>2. Is there a time of the year that females move more frequently that increases road mortality?</li><li>3. Do you have an issue with protecting nests; are raccoons a problem?</li><li>4. Is there an opportunity to mimic roadside conditions elsewhere on site to reduce road mortality?</li><li>5. What is the success rate of moving small populations to other locations?</li><li>6. What are the other types of mortality?</li><li>7. Have you considered additional signage to reduce road mortality?</li><li>8. What would the process be to reduce the speed limits on Plant Road?</li><li>9. Is it possible there are other Blanding turtle populations on site; perhaps in the unchartered areas?</li></ol> <p><i>ESC Action 160324:01 – What would the process be to reduce the speed limits on Plant Road. George Dolinar is responsible for this action.</i></p> |

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| <p>3:00 – 3:15 PM</p> <p>In the Community</p> <p>Nicole LeBlanc</p> | <p>Nicole LeBlanc - Public Affairs Officer at CNL gave an update on CNL activities with the public since the last meeting in October 2015 including the CNL site United Way campaign/s success, Let's Talk Energy activities and the recent Canadian Nuclear Association (CNA) and Waste Management conferences. Upcoming community engagements include Petawawa SHOWCASE, National Science and Technology Week (NSTW), the Canadian Cancer Society Mud Run and the CNL Advanced Reactor Forum being held on May 10-11 in Ottawa, ON.</p>   |
| <p>3:15 – 3:30 PM</p> <p>Closing</p> <p>John Vincett</p>            | <p><i>ESC Action 160324:02 – Environmental Stewardship Council - Terms of Reference (TOR) have not been updated since 2010; CNL Corporate Communications will update the TOR for the ESC membership and alternate list for review and approval. Nicole LeBlanc is responsible for this action.</i></p> <p>John Vincett gave a recap of the meeting and reviewed the actions and reminded council to fill out evaluation forms.</p> <p>Next ESC meeting – Thursday, June 16, 2016 at Canadian Nuclear Laboratories Chalk River site.</p> <p>There were no comments on the new actions or about the recap of the meeting.</p> |

**ESC Participants:**

Peter Arbour, Petawawa Research Forest  
Bruce Bigham, Deep River Horticultural Society  
James Gibson, Municipalité régionale de comté de Pontiac  
Steve Gutzman, Parkline Sportsmen Club  
Meghan Hendry, Garrison Petawawa  
Ken Hooles, Pembroke Area Field Naturalists  
Robert Kingsbury, Renfrew County Council  
Joan Lougheed, Town of Deep River  
John McKay, Four Seasons Conservancy  
Craig Robinson, Old Fort William Cottagers' Association  
Theresa Sabourin, Town of Petawawa (PM only)

**ESC Alternates:**

Christine Reavie, City of Pembroke

**Canadian Nuclear Laboratories:**

Shaun Cotnam, Senior Director, Compliance  
Kevin Daniels, General Manager, HSSE  
George Dolinar, Environmental Program Authority  
Kurt Kehler, Vice President Decommissioning and Waste Management  
Nicole LeBlanc, Communications Officer, Corporate Communications  
Mark Lesinski, President & CEO  
Steve Liblong, Director, DWM S&T Transition Advisor  
Mitch MacKay, Communications Officer, DWM  
Pat Quinn, Director, Corporate Communications

**Invited Observers:**

Wasif Islam, Canadian Nuclear Safety Commission (CNSC)  
Page, Maude, Director of Communications, AECL

**Facilitator:**

John Vincett, Public Dialogue Alternatives

**Invited Guests:**

Blouin-Demers, Gabriel, University of Ottawa  
Butz, Todd, CNL  
Colby, Brian, CNL  
Hawkins, Emily, University of Ottawa (student)  
Hersak, Greg, CNL  
Morin, Annie, CNL

**Absent:**

Meredith Brown, Ottawa Riverkeeper  
Marc Laurin, Métis Nation of Ontario, North Bay  
David Lee, Environmental Scientist, Environmental Technologies  
Bob MacKenzie, Upper Ottawa Valley Ducks Unlimited  
Jim Meness, Algonquins of Pikwakanagan  
Jed Reinwald, Town of Laurentian Hills  
Karen Stokes, Ontario Ministry of Natural Resources, Pembroke