

Information Note
Department of Environment and Climate Change (ECC)

Title: Methylmercury Mitigation Workshop and Human Health Risk Assessment Plan for the Lower Churchill Generation Project

Issue: This note is to provide an update on the Methylmercury Mitigation Workshop held on August 4, 2016, in Happy Valley-Goose Bay (HVGB) and the appeal under the *Environmental Protection Act* by the Nunatsiavut Government (NG) of the Minister's decision to accept Nalcor's Human Health Risk Assessment Plan (HHRAP).

Background and Current Status:

- On March 15, 2012, Nalcor's Lower Churchill generation project was released from environmental assessment (EA) after a comprehensive independent federal-provincial Joint Review Panel (JRP) Process.
- There were numerous conditions associated with this release, including several environmental effects monitoring plans related to methylmercury. Nalcor's HHRAP, together with a number of other monitoring plans already submitted, mitigation measures (e.g. approx. 75 per cent vegetation removal from the reservoir) and ongoing monitoring obligations, fulfilled the terms and conditions of their release related to methylmercury.
- Methylmercury accumulation in the reservoir and the possibility of bio-accumulation in country foods (fish and seal) was a known aspect of the Muskrat Falls project and was examined by the JRP prior to the release of the project in 2012.
- A scientific workshop was held in March to which the NG was invited but declined to participate. Various federal and provincial departments, as well as Nalcor, were present.
- On June 14, 2016, the Minister of ECC held a news conference announcing the acceptance of the HHRAP with a condition that requires Nalcor to provide reasonable and appropriate compensation measures to address the impact of any consumption advisories that are identified from methylmercury monitoring. The addition of this condition aligned with the nature of a recommendation of the JRP regarding methylmercury affects. This was in addition to a decision by the Department of Fisheries and Oceans (DFO) that Nalcor must expand their sampling program further east in Lake Melville.
- The news conference was also used to respond to broader issues being raised by the NG since the launch of their "Make Muskrat Right" Campaign, the core aspect of which was a call for full clearing of the reservoir, inclusive of soil removal, so as to reduce the effects of methylmercury downstream. Each of these points was discussed at the March workshop.
- The announcement by the Minister in June regarding the HHRAP, and subsequent written communication to the NG which indicated that the partial clearing scenario (approximately 75 per cent of vegetation, no soil removal) agreed to by the Government in 2012 continued to be the most appropriate option, resulted in two main actions by the NG:
 1. Organized protests, including: a protest of approximately 130 on June 17th at Minister Trimper's HVGB office; and a rally held in HVGB on June 27, 2016, while the Premier was in town for Expo, organized by the NG and attended by the three Aboriginal organizations, with several hundred protestors present; and


2. An appeal under section 107 of the *Environmental Protection Act* of the Minister's decision to accept the HHRAP.
- At the June 27, 2016 rally Premier Ball reiterated the Minister's commitment to reconvene scientific experts to discuss methylmercury and subsequently wrote the three Aboriginal leaders encouraging their participation in a second workshop.
 - On August 4, 2016 the second workshop was held in HVGB, which was facilitated by Mr. Wayne Thistle, of the Centre for Innovative Dispute Resolution.
 - The workshop was well attended, with experts representing provincial and federal departments with the most significant roles (regulatory or otherwise) in the Muskrat Falls project. In addition to government entities, Nalcor staff and their experts, and all three Aboriginal organizations - NG, NunatuKavut Community Council (NCC), and the Innu Nation (IN) – who had their leaders and senior staff in attendance. There was also academic representation, as the NG invited the researchers they have been working with over the past few years (Dr. Elsie Sunderland and Dr. Trevor Bell).
 - The goal of this workshop was to convey perspectives, encourage open dialogue and provide an opportunity for questions and discussion on the topic of methylmercury mitigation measures regarding the Muskrat Falls project.
 - The workshop agenda and a list of participants and observers can be found at Annex A and B, respectively.
 - Since the workshop, protests have continued (e.g. approx. 55 at Minister Trimper's HVGB office on August 18th) and the NG, IN and NCC have all inquired as to next steps and timing, expressing concern regarding upcoming flooding planned as part of Nalcor's project schedule.
 - On August 12, 2016, the NG filed a formal appeal of the Minister's decision to accept the HHRAP. This appeal was filed under section 107 of the *Environmental Protection Act*, which requires that the Minister reply within 30 days.
 - On August 24, 2016, the NG wrote Prime Minister Trudeau expressing their concerns for their "health, livelihood and cultural way of life." They reiterated their call for full clearing of vegetation and removal of soil, and an independent expert advisory committee reporting to a joint management body on which the Inuit are "full and equal partners". They further asked that the Department of Fisheries and Oceans (DFO) "rescind its authorization for this project or amend the authorization to require changes" and that the Federal Government "deny the request from the Government of Newfoundland and Labrador to increase the current loan guarantee or to issue new guarantees".

Analysis:

- The workshop achieved its objective of a full and open dialogue regarding the science surrounding the issue of methylmercury. The discussion demonstrated areas of agreement, and also showed differing opinions on some aspects of the application of the research, differences in views re the protection to human health achievable through monitoring, and potential gaps in some areas of research. It also identified the technical and economic challenges that would arise in a soil removal scenario.

- The facilitator drafted a summary report from the workshop which is anticipated to be shared with participants the week of August 29th. The report will focus on reporting, versus analyzing, what was heard. Participants will have an opportunity to comment on the summary report before it is finalized but only with respect to a factual confirmation of what was said during the workshop.
- ECC is working with Justice and Public Safety (JPS) regarding the appeal of the Minister's HHRAP decision. Preliminary discussion indicates that the appeal document raises elements not pertinent to the HHRAP (which is essentially a plan to conduct baseline monitoring of methylmercury levels in people through dietary surveys and hair sampling) and hence the response to the appeal may need to dissect the HHRAP challenges from the broader issues raised.
- ECC has shared the appeal letter with Nalcor (as proponent), DFO, Health Canada, and Environment and Climate Change Canada (ECCC), seeking their assessment of its arguments.
- Minister Trimper has committed publicly to awaiting the workshop summary report before taking a position on what actions, if any, are required as a result of workshop discussions. However, having participated in the workshop, officials of ECC have begun assessing our next step, as Regulator, and have initiated dialogue with key federal agencies in that regard. On August 9, 2016, Minister Trimper and senior staff of ECC met with Minister McKenna and her senior staff in Halifax to further discuss this issue and its national implications.
- A response to the appeal is due on September 11, 2016, and will be determined separately from next steps regarding the broader issues that were the focus of the recent workshop discussions.

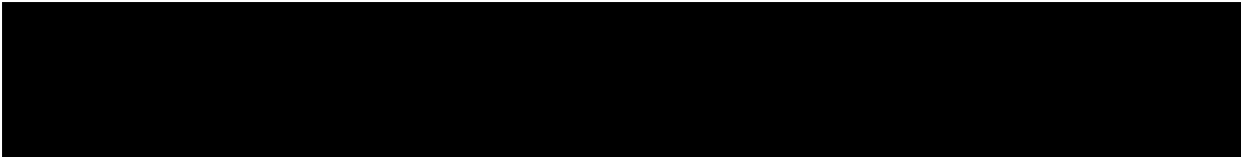
Action Being Taken:

- Following receipt of the final workshop summary report ECC will be making it available to the public.
- At that time, the Minister of ECC will be writing Ministers McKenna, LeBlanc, and Philpott, with a copy to Minister Carolyn Bennett, Minister Judy Foote, and MP Yvonne Jones, seeking their comments from their respective mandates, on the workshop discussions and how or if it alters their position on any aspects of the project.
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- ECC will continue to assess any actions required by the department, as Regulator, arising from the workshop discussions.

Prepared/Approved by: B. Cleary/M. Goebel/C. Janes
Reviewed by: P. Howe/E. Day, Cabinet Secretariat
Ministerial Approval: Received from Hon. Perry Trimper

August 29, 2016

Cabinet Secretariat Comment:

- The Communications Branch notes that ECC has advised that it will be sharing key messages with the Premier's Office regarding NG's appeal of the Minister's decision to accept the HHRAP. ECC's key messages are as follows:
 - The appeal from the Nunatsiavut Government is being considered.
 - As part of this work, the Minister is seeking advice from provincial and federal experts including those with Health Canada, Health and Community Services, Fisheries and Oceans Canada and Environment Canada.
 - Under legislation, the minister has 30 days from the date of receipt to notify the appellant in writing of his decision.
 - The Minister's decision will be announced publically in the Environmental Assessment bulletins, as is regular procedure.
- LAO suggested including a bullet describing why methylmercury generation/accumulation is a concern. In response, ECC notes methylmercury is created in reservoirs whereby normally occurring inorganic mercury (relatively non-toxic form) is converted to methylmercury (toxic form) by flooded vegetation. Methylmercury is taken up by fish and other aquatic species and not excreted but instead bio-accumulates up the food chain in the tissue and can cause adverse human health effects if the tissue is consumed. Consumption advisories are issued to prevent the risk to human health.
- ECC advises there is no prescribed appeal process in the *Environmental Protection Act* and the process is guided by commonly used legal principles. ECC further advises it announces important steps and documents throughout any environmental assessment process, and ECC is of the view it would be prudent to post the appeal letter.
- ECC and HCS note the HHRA is expected soon and will be assessed separately from the appeal.
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- IGAS has no concerns.

**Annex A
Workshop Agenda**

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| 8:30 am | Opening Welcome | Facilitator |
| | <ul style="list-style-type: none"> • Workshops origins, objectives and themes | |
| 8:45 am | Review of Workshop Process and Agenda | Facilitator |
| | <ul style="list-style-type: none"> • Review workshop process and agenda and facilitator/recorded role | |
| 9:00 am | Participant Introductions | All participants |
| | <ul style="list-style-type: none"> • Each person will introduce themselves and note the organization they are representing. | |
| 9:15 am | Opening Comments | Martin Goebel |
| | <ul style="list-style-type: none"> • The Department of Environment and Conservation will present an overview of the EA process for the Muskrat Falls project and the evidence that informed Government's June announcement. | |
| 9:45 am | Pre-inundation Mitigations: Evidence and Options | All participants |
| | <ul style="list-style-type: none"> • Beginning with the Nunatsiavut Government's expert representative(s), who will present their research, each organization's expert(s) will have approximately 10 minutes to introduce their perspective and evidence on mitigation options for methylmercury reduction; this will be followed by a discussion amongst participants. | |
| 11:00 am | Coffee Break | |
| 11:15 am | Pre-inundation Mitigations: Evidence and Options (cont'd) | All participants |
| 1:30 pm | Lunch Break (Provided) | |
| 2:00 pm | Post-inundation Mitigation/Monitoring and other tools | All participants |
| | <ul style="list-style-type: none"> • Beginning with the Nunatsiavut Government's expert representative(s), who will present their perspectives and proposed solutions regarding the implications for Inuit Health, each organization's expert(s) will have approximately 5 -10 minutes to outline their perspective regarding this issue, inclusive of the monitoring program in place; this will be followed by a discussion amongst participants. | |
| 5:00 pm | Closing Comments | Facilitator |
| | <ul style="list-style-type: none"> • The Facilitator will explain how the outcome summary document will be completed and distributed to participants. Thank all participants for attending the workshop. | |
| 5:15 pm | Close of workshop | |

Annex B - Workshop Attendees**Participants**

Wayne Thistle – Facilitator, Centre for Innovative Dispute Resolution
 Brian Harvey – Director, Labrador and Aboriginal Affairs, Note Keeper
 Paul Carter – Environmental Scientist, ECC
 Martin Goebel – ADM Environment, ECC
 Geoff Mercer – Regional Director General, Environment and Climate Change Canada
 Dr. Wolfgang Jansen – Aquatic Scientist, Innu Nation
 George Russell, - Environment and Resource Manager, NunatuKavut Community Council, Inc.
 Jim McCarthy – Senior Aquatic Lead, LC Project, Nalcor
 Jackie Wells – EA Commitments/ Environmental Effects Monitoring Programs Lead, Nalcor
 Rob Willis – Senior Toxicologist & Risk Assessor, Dillon Consulting for Nalcor
 Peter Madden – Regulatory Compliance Lead, Nalcor
 Dr. Jane Kirk – Research Scientist, Environment and Climate Change Canada
 Greg Kaminski – Senior Environmental Health Assessment Specialist, Health Canada
 Colin Carroll – Regional Ecosystem Director, NL Forestry and Agrifoods Agency
 Bruce Pauli – Research Manager and Chief, Environment and Climate Change Canada
 Dr. Margo Wilson – Labrador-Grenfell Regional Health Authority
 Diane Oliver-Scales – Labrador-Grenfell Regional Health Authority
 Dr. David Allison – Chief Medical Officer of Health, HCS
 Rodd Laing – Director of Environment, Nunatsiavut Government
 Carl McLean – Deputy Minister of Lands and Natural Resources, Nunatsiavut Government
 Dr. Trevor Bell – Professor, Memorial University of Newfoundland

Dr. Elsie Sunderland – Associate Professor, Harvard University (via telephone)
 Dr. Robin Anderson – Research Scientist, Fisheries and Oceans Canada (via telephone)
 Renee Patterson – Senior Environmental Scientist, ECC (via telephone)
 David Haley – Environmental Regulatory Compliance Manager, Nalcor (via telephone)
 Reed Harris – President, Reed Harris Environmental LTD for Nalcor (via telephone)

Observers

Johannes Lampe – President, NG
 Honourable Darryl Shiwak – Minister of Lands and Natural Resources, NG
 Honourable Greg Flowers – Minister of Health and Social Development, NG
 Isabella Pain – Deputy Minister of the Nunatsiavut Secretariat, NG
 Michelle Kinney – Deputy Minister of Health and Social Development, NG
 Loretta Michelin – Director of Legal Services, NG
 Bert Pomeroy – Communications, NG
 Anastasia Qupee – Grand Chief, Innu Nation
 Richard Nuna – Manager of Environmental Programs, Innu Nation
 Donna Paddon – Communications, Innu Nation
 Paula Reid – Innu Nation
 Cathy Guirguis – OLTHUIS, KLEER, TOWNSHEND LLP, Legal Counsel, Innu Nation
 Todd Russell – President, NCC
 Roberta Benefiel – Grand Riverkeepers
 Lisa Dempster – MHA, Cartwright-L'Anse au Clair
 Randy Edmunds – MHA, Torngat Mountains
 Honourable Perry Trimper – Minister, ECC
 Emily Timmins – Director of Communications, ECC
 Bonnie Learning – Constituency Assistant to the Honourable Perry Trimper

Michelle Watkins – Director, Labrador and Aboriginal Affairs Office