

MEETING NOTES

**Independent Expert Advisory Committee (IEAC)
Oversight Committee (OC)
Face to Face Meeting - September 20, 2017
8:00 a.m. – 4:00 p.m.
169 Hamilton River Rd.**

Attendees:

IEAC Staff

Dr. Ken Reimer – IEAC Chair
Ms. Marina Biasutti-Brown - Research Director
Ms. Roxanne Mitsuk – Senior Administrative Assistant

Oversight Committee Members

Mr. Martin Goebel – Government of Newfoundland and Labrador
Mr. Greg Nuna – Innu Nation
Mr. Carl McLean – Nunatsiavut Government
Mr. George Russell – NunatuKavut Community Council
Mayor Jamie Snook – Municipalities (Town of HV-GB) (Regrets)
Mr. Peter Madden – Nalcor Energy
Ms. Abla Hanna – Government of Canada (Teleconference)

Alternates

Mr. David Haley – Nalcor Energy
Ms. Tammy Lambourne – NunatuKavut Community Council
Mr. Randy Dillon – Municipalities (Town of HV-GB)

Technical

Ms. Jennifer Dorr – Government of Canada
Ms. Brigid Rowan – NunatuKavut Community Council
Mr. Rodd Laing – Nunatsiavut
Ms. Cathy Guirguis – Innu Nation
Ms. Donna Paddon – Innu Nation

1. Introductions/Logistics

Ken Reimer opened the meeting welcoming all participants with introductions and gave a presentation on the IEC Activities, goal, and focus.

2. Agenda Review and Approval

The following Agenda was approved by all Members:

1. Introductions/Logistics
2. Agenda Review and Approval
3. IEC Activities
4. Mitigation
5. Monitoring
6. Management
7. Other Business
8. Next Steps
9. Next Meeting

3. IEC Activities

The IEC has met five times to date with one face to face meeting (September 7 and 8) and four teleconferences. All IEC members with the exception of the Innu Nation representative were in attendance at the in-person meeting, and Dr. Jane Kirk attended by teleconference. This meeting went over very well, with great of participation and input by all members. The IEC will hold another teleconference on September 21 to discuss next steps. The IEC is pleased with the assistance and cooperation that they have been receiving from all involved when needed.

4. Mitigation

Ken Reimer summarized the work that the IEC has done with regards to evaluating potential mitigation measures, and presented the following recommendation to the OC for consideration:

Recommendation #1: The IEC recommends that Nalcor undertake a feasibility study for topsoil removal within the future reservoir area.

It was agreed that the recommendation be re-worded to in the following way:

Recommendation #1: The IEAC recommends that a feasibility study be undertaken by December 20, 2017, for the removal of soil and vegetation from the future reservoir area.

Additional discussion followed, including the following information items and comments:

- Regarding Dr. Elsie Sunderland's (Harvard) findings on increases in methylmercury levels: All soils contain inorganic mercury and carbon. The Harvard study was based on carbon estimates from satellite imagery. Harvard used a computer model to evaluate how much methylmercury might be produced after full impoundment. The IEC would like to use the Harvard model to evaluate how various input parameter changes influence methyl mercury production. We also need to make people aware that methylmercury does not stay in your system, it slowly leaves the body if the source (food) is changed.
- Regarding the feasibility of soil and vegetation removal: Discussion around burning stockpiles at Edward's Island. As well, Nalcor has a good idea where the organic carbon is as they have completed study of the various soil types. Removal of materials from the reservoir area could reduce the availability of labile organic

- carbon for methylmercury production.
- Ken and Marina went on a helicopter tour over Muskrat Falls and surrounding areas, they have photos posted to the drop box for viewing by the IEC.
- Ken believes that Nalcor can do a feasibility study fairly quickly. The Scientists/Experts could provide assistance when it comes to finding the best areas to remove soil – i.e. which might be most useful in reducing methylmercury production.
- Carl McLean suggested that we should have an Independent Engineer working on this study, in addition to Nalcor representatives.
- Dave Haley – not a small task, some boggy areas will make it difficult to get to, need to look at equipment, logistics, soil removal, road stability. It could be done at a ‘10,000 foot level’, you need to decide how much you would need to have access to. Clearing the whole reservoir would take years.
- The IEAC will determine where the priority areas are with regards to MeHg production. Research Portfolio #1 will provide additional data on this, and we are expecting preliminary results by December. As well, IEC members are reviewing the soil inventory data produced by Nalcor.
- With regards to the controlled burning option, Greg Nuna raised concerns with regards to burning of sacred sites. That this information should be gathered in order to avoid burning near any of these areas.
- Ken assured the group that the IEC will get a package together with solid details to provide to Nalcor.

5. Monitoring

- a. Ken summarized the IEC’s analysis of Nalcor’s aquatic Environmental Effects Monitoring Program, and the resulting report, and presented the following recommendation to the OC:

Recommendation #2: The IEC recommends that Nalcor implement the changes described in the IEC report titled “Recommendations on changes to the scope and quality of the Muskrat Falls AEEMP, 15 September 2017”.

The IEC report also recommends reductions in the frequency and type of sampling in some areas, cost-savings that could be applied to strengthen other aspects of the program. Some detection limits have been too high to provide meaningful baseline results to date, and there have been recent improvements (e.g. 8 June, 16 Aug, 8 and 11 Sept) that the group fully supports.

- b. Ken spoke about the necessity to rely on mathematical models to predict future changes, and summarized the Harvard model and its uncertainties. He indicated that Nalcor has taken on a new modeling project led by Reed Harris, which will include Lake Melville and will include hydrodynamic data dealing with the mixing of water below Muskrat Falls and will incorporate the information into the Nalcor human health risk assessment. The IEC supports the idea and feels that his work needs to be looked at very soon. The following recommendation was brought forward for consideration by the OC:

Recommendation #3: The IEC recommends that Nalcor expedite the finalization of their modelling efforts and complete the work no later than February 15, 2018.

The IEC will use the Harvard model to determine how changes in Methylmercury production might influence food sources. Looking at the baseline food chain for phytoplankton & zooplankton. Environment Canada has been collecting this sort of data now for a couple of years.

- c. Response to Nunatsiavut Government Letter: Ken presented the following statement from the IEC arising from their analysis of the water mercury level data since the increase in water levels in February 2017:

In the opinion of the Independent Expert Committee, there is inconclusive evidence linking increases in water levels (to approximately 21-22 m asl) in the Muskrat Falls head pond and methylmercury production downstream in the Churchill River and Lake Melville (based on data between November 2016 and the most recent available data for July 19, 2017).

The key reasons for the inconclusive analysis were summarized and discussed. Ken stated that once the remaining summer and fall data are available, they will be analyzed and an updated report will be presented to the OC.

Other comments brought forward during this discussion were as follows:

- Communication – The general public is confused. We need to communicate the science in layman's terms so that everyone will understand. Bring the suggested wording back to the Experts to ensure that the meaning hasn't changed.
- There was a meeting between SNC Lavalin and Indigenous Groups on September 6, 2017. They talked about the landslide risks related to raising and lowering water levels, and Nalcor's claim that for this reason, the reservoir cannot be lowered after this winter's increased water levels. OC members (in particular NCC and NG) raised concerns with regards to this claim, and have requested that the IEAC commission an independent analysis of SNC Lavalin's Slope Stability Report. Jennifer Dorr requested a copy of the back-up data that was provided for the presentation at the September 6 meeting. **Ken will request the information and send it to NRCan. Ken will make a formal request for NRCan to provide assistance in reviewing information on stability factors and future situations. NCC and NG will send specific questions to Ken that they would like to be addressed in NRCan's review.** Would also be beneficial obtain the SNC study of the landslide that took place here in 1979.
- The analysis of large volumes of data is very time-consuming and we need to hire a person that has skills in data analysis and statistics. We have a person in mind for this and are negotiating a contract with this individual.

6. Management

- a. Communications Strategy: Ken presented the initial plan for communications compiled by the IEC. **The OC will review the Draft Communications Strategy and provide comments by the next OC meeting.**
- b. Website: The initial means of public communications for the IEAC will be via a website. **Marina will work on this in consultation with the IEC and the OC Communications personnel.**
- c. Human Exposure: Biomonitoring: A contract will be let to work with the information gathered by the two existing Human Health Risk Assessments (Dillon/Nalcor and Harvard), with the goal of helping to develop initial messaging and determine what

additional work needs to be done. Ken is looking at setting up a small contract to have someone get all information together and identify the gaps.

7. Other Business

Indigenous Knowledge Study: There was discussion about the importance of conducting an Indigenous Knowledge Study to create a store of relevant IK that will inform scientists, determine what gaps might exist, and help identify potential impacts that are specific to Indigenous values. **The Innu Nation, NCC and NG agreed to develop a scope of work for such a study, to determine an estimated cost, and to suggest people to conduct the study.**

8. Next Steps

All IEC Recommendations were accepted by the IEAC Oversight Committee. **Marina will draft a letter containing the recommendations to the Responsible Ministers tomorrow morning.** The letter will also describe in general the progress of IEAC. The letter will be directed to:

- Hon. Eddie Joyce, Minister of Municipal Affairs and Environment
- Hon. Jim Carr Minister of Natural Resources Canada

All comments from OC members on the draft letter should be sent in before the end of the day tomorrow and the Letter with recommendations should be sent to the Minister by Friday lunchtime.

By Friday afternoon, Marina will draft up a media release showing progress of IEAC and informing the public of the Letter and recommendations that have been sent to the Province. OC comments on the Media Release should be provided by Monday at noon, for a Monday afternoon release.

9. Next Meeting

The next IEAC Oversight Committee meeting will be by teleconference within one month, and the next face to face meeting will be during the week of March 5th 2018.

Meeting adjourned at 4:00 p.m. Atlantic Time.