OH-4-2011

Notice of Motion

Name of person bringing motion: Haisla Nation

Decision or order requested:

This Motion by the Intervenor, Haisla Nation, is made pursuant to Hearing Order OH-4-2011 and section 35 of the *National Energy Board Rules of Practice and Procedure*, 1995. SOR/95-208, for:

- an order that Northern Gateway must provide full and adequate response to those portions of Haisla Nation Information Request No. 1 identified herein by a fixed date;
- an order that Northern Gateway must provide a full and adequate response to JRP Information Request No. 4.32 by a fixed date;
- an order that the Northern Gateway pipeline risk assessment and supporting studies and reports be provided by a fixed date;
- d. an adjournment of proceedings until Northern Gateway has provided the information required pursuant to paragraphs a to c, above;
- an amendment to the Hearing Order that sets new and reasonable deadlines for information requests and written intervenor evidence, oral testimony and final hearings, once Northern Gateway has provided the all the information required pursuant to paragraphs a to c, above; and
- f. such other relief as the Panel may consider appropriate in the circumstances.

The Haisla Nation further respectfully requests that the November 3, 2011 deadline for the second round of information requests from intervenors and government participants to Northern Gateway be extended until this Motion is heard, and that the JRP's ruling on this Motion set a new deadline which is either consistent with the relief sought above, or which provides the parties with a reasonable amount of time to file their information requests.

Date submitted:

October 28, 2011

Signature:

Print Name:

Jennifer M. Griffith, Counsel for the Haisla Nation

Attachments:

Notice of Motion with concise statement of relevant facts; grounds for request; and detailed description of

the decision or order sought.

Northern Gateway Pipelines Inc. Section 52 of the National Energy Board Act Application for Enbridge Northern Gateway Project NEB File OF-Fac-Oil-N304-2010-01 01 Filed 27 May 2010

To: Secretary to the Joint Review Panel Enbridge Northern Gateway Project 444 - Seventh Avenue S.W. Calgary, Alberta T2P 0X8

by
HAISLA NATION

Donovan & Company 6th Floor, 73 Water Street Vancouver BC V6A 1A1 Phone No. (604) 688-4272

Northern Gateway Pipelines Inc. Section 52 of the National Energy Board Act Application for Enbridge Northern Gateway Project NEB File OF-Fac-Oil-N304-2010-01 01 Filed 27 May 2010

OH-4-2011

NOTICE OF MOTION

INTRODUCTION

- This Motion by the Intervenor, Haisla Nation, is made pursuant to Hearing Order OH-4-2011 (the "Hearing Order") and section 35 of the National Energy Board Rules of Practice and Procedure, 1995, SOR/95-208, for an order that:
 - Northern Gateway must provide full and adequate response to those portions of Haisla Nation Information Request No. 1 identified herein by a fixed date;
 - Northern Gateway must provide a full and adequate response to JRP IR No. 4.32 by a fixed date;
 - the review of the Northern Gateway Project be adjourned until Northern Gateway has provided the requested responses to the information requests detailed herein;
 - the Hearing Order be amended to set new and reasonable deadlines for information requests and written intervenor evidence, oral testimony and final hearings, once Northern Gateway has provided the required information; and
 - e. such other relief as the Panel may consider appropriate in the circumstances.

FACTS

Northern Gateway Application

- On May 27, 2010, Northern Gateway Pipelines Inc. ("Northern Gateway") applied to the National Energy Board for authorization to construct and operate an oil export pipeline and associated facilities, a condensate import pipeline and associated facilities, and a tank terminal and marine terminal (the "Kitimat Terminal") to be located near Kitimat, British Columbia ("BC") (the "Project").
- On July 5, 2010, the Joint Review Panel ("JRP" or "Panel") issued a Procedural Direction seeking comments on a number of issues, including additional information which Northern Gateway should be required to file.
- On January 19, 2011 the JRP issued a decision, as a result of submissions made pursuant to its Procedural Direction dated July 5, 2010, requiring Northern Gateway to file additional information prior to a hearing order being issued (JRP)

- January 19, 2011 Panel Session Results and Decision, A1X2L7 the "JRP Decision").
- 5. The JRP Decision identified this additional information as required to assist all parties and the Panel to better understand the consequences of hydrocarbon releases and how these consequences will influence Project design and operation.
- 6. The JRP Decision required Northern Gateway to provide information about the conceptual design of the pipeline that demonstrates:
 - how the risk factors resulting from the geotechnical and geographic aspects of the applied-for corridor and terminal will be taken into account;
 and
 - the integration of the risk factors with the environmental and socioeconomic consequences from potential hydrocarbon releases.

Hearing Order

- 7. On May 5, 2011 the JRP issued Hearing Order OH-4-2011 (the "Hearing Order") which, *inter alia*, sets deadlines for matters such as filing information requests and evidence, and sets tentative hearing dates.
- 8. The Hearing Order states that "The Panel requires fairness and encourages efficiency in its proceedings and asks that all participants observe the deadlines" and "the deadlines for this joint review process have been established in order to provide certainty to all participants" (OH-4-2011, p. 5).
- The Hearing Order sets deadlines for information requests from intervenors and responses to intervenor information requests by Northern Gateway, as well as a deadline for the subsequent filing of written evidence by intervenors.

Haisla Nation July 21, 2011 Notice of Motion

10. On July 21, 2011 the Haisla Nation filed a Notice of Motion seeking an order that Northern Gateway be required to provide specific additional information, that the JRP review of the proposed Project be adjourned pending the provision of this information, and that the Hearing Order for the proposed Project be amended to adjust timelines for the filing of information requests and written evidence, accordingly ("A30426").

JRP Response to July 21, 2011 Haisla Nation Notice of Motion

11. On July 29, 2011 the JRP responded to the Haisla Nation's July 21, 2011 Notice of Motion, denying the relief sought on the basis that the Motion was premature, and ruling that the Haisla Nation could "request the Additional Information directly from Northern Gateway, through the information request process" ("A30539").

Information Requests and Responses

- On August 25, 2011, the Haisla Nation submitted its Information Request No. 1 to Northern Gateway ("A2C4Q1") pursuant to the timeline established in the Hearing Order.
- 13. On October 6, 2011, Northern Gateway provided responses to the Haisla Nation's Information Request ("A2E8Y0"). Northern Gateway has failed to fully and adequately respond to the following Haisla Nation Information Requests: Information Request Nos. 1.6, 1.9-1.11, 1.13, 1.20-1.27, 1.29, 1.36-1.39, 1.42-1.44, 1.46, 1.47, 1.49, 1.50-1.52, 1.56, 1.62 and 1.67.
- 14. On August 18, 2011, the JRP issued its Information Request No. 4 to Northern Gateway ("A30818"). In that Information Request the JRP requested a detailed response to concerns raised and purported deficiencies identified in a memorandum (Exhibit A1Z9Z4) attached to a Letter of Comment submitted by Dogwood Initiative (JRP Information Request No. 4.32, A30818). This information request included some of the information identified by the Haisla Nation in its July 21, 2011 Notice of Motion as required before the JRP review of the proposed Project should proceed.
- On September 22, 2011, Northern Gateway provided its response to JRP Information Request No. 4, and attached a table in response to JRP Information Request No. 4.32 ("A31684").
- 16. Northern Gateway's response to JRP Information Request No. 4.32 was inadequate. Further, it identifies that work critical to the review of the proposed Project has neither been completed nor provided to the parties.

Information Required for Project Review

- 17. The proposed Project entails a pipeline, a marine terminal, and tanker traffic which, if constructed, will impact environmentally sensitive and culturally important habitat and resources throughout Haisla Nation territory. Faced with this prospect the Haisla Nation has engaged in the federally mandated Joint Review Panel review of the proposed Project. As part of this process, the Haisla Nation has submitted information requests to the proponent that are designed to assist the Haisla Nation, and the JRP, other parties, and the Canadian public to adequately understand all of the potential impacts and risks associated with the proposed Project that could result in significant environmental effects, and how the proponent, Northern Gateway, proposes to address these impacts and risks in order to avoid having significant adverse environmental effects occur.
- 18. All parties, including intervenors, ought to have access to the information required to understand all of the potential impacts of and risks associated with the proposed Project that could result in significant adverse environmental effects and how the proponent proposes to address these impacts and risks in order to avoid having significant adverse environmental effects occur.

- The JRP review of this proposed Project must be careful, precautionary, open, transparent, fair and informed.
- Northern Gateway has failed to provide a full and adequate response to a number of Haisla Nation information requests.
- 21. Northern Gateway has failed to provide an adequate response to an information request issued by the JRP seeking information which the Haisla Nation also sought through its July 21, 2011 Notice of Motion.
- 22. Northern Gateway is still conducting and has not yet provided studies and assessments that are critical to understanding potential impacts and effects of the proposed Project. It is unreasonable to require intervenors and government participants to file the second (and, under the current Hearing Order, final) information request and their written evidence before Northern Gateway has provided this additional information.
- 23. Northern Gateway has not provided adequate information about pipeline risk and risk assessment for the Haisla Nation and other intervenors to assess the potential risk and identify the potential evidence they may need to file to address this risk. It is unreasonable to require intervenors to file the second (and, under the current Hearing Order, final) information request and their written evidence before Northern Gateway has provided its pipeline risk assessment.
- 24. The Haisla Nation seeks to rely on all of the information requested and identified as not having been provided to:
 - a. fully understanding Northern Gateway's intentions with respect to the proposed Project design, risk, and safety features; and
 - b. fully understand Northern Gateway's proposed approaches to:
 - pipeline design, the selection of pipeline materials and pipeline construction methods;
 - storage tank design, the selection of storage tank materials and the storage tank construction methods;
 - iii. how mitigation will be applied to address challenging terrain features during construction and operation throughout the life of the proposed Project;
 - the monitoring methods and equipment that will be employed for maintaining pipeline integrity throughout the life of the proposed Project;
 - the environmental effects of the pipeline right of way, particularly on water-crossings of tributaries to the Kitimat River;
 - vi. potential environmental impacts and effects of an accident or malfunction during the life of the proposed Project that releases diluted bitumen or condensate into the Kitimat River and its tributaries, and into Kitimat Arm;

- vii. the composition and toxic properties of the products transported and the range of environmental effects on habitats, fish, birds and wildlife, as well as human health, that would occur due to an accident or malfunction;
- viii. the potential effects of the environment (earthquakes, flooding, erosion, slides, freeze/thaw, etc.) on pipeline integrity and storage tank integrity throughout the life of the proposed Project; and
- ix. how mitigation will be applied to address accidents or malfunctions along the pipeline route, at the terminal storage tank farm, and during ship transport, including but not limited to:
 - a. the effectiveness of spill response planning;
 - emergency response infrastructure and procedures;
 - spill containment methods and procedures;
 - d. clean-up methods and procedures; and
 - e. environmental and cultural damage assessment methods and procedures.

GROUNDS FOR MOTION

- 25. This Motion is brought pursuant to the *National Energy Board Rules of Practice* and *Procedure*, 1995, SOR/95-208, s. 35, and Hearing Order OH-4-2011, s. 10, seeking relief on the basis of:
 - a. The Agreement Between the National Energy Board and the Minister of Environment Concerning the Joint Review of the Northern Gateway Pipeline Project, ss. 6.3 and 6.4, and Appendix Terms of Reference; and
 - b. Hearing Order OH-4-2011, s. 4.
- 26. The Agreement Between the National Energy Board and the Minister of Environment Concerning the Joint Review of the Northern Gateway Pipeline Project, s. 6.3, requires the Panel to conduct its review in a careful and precautionary manner.
- 27. The Agreement Between the National Energy Board and the Minister of Environment Concerning the Joint Review of the Northern Gateway Pipeline Project, s. 6.4, requires the Panel to conduct its review in a manner which will facilitate the participation of the public and Aboriginal peoples.
- 28. The Terms of Reference require the consideration of the environmental effects that may occur in connection with the proposed Project, including from malfunctions or accidents, as well as the significance of such effects. Determining the significance of effects requires a thorough understanding of the risks related to the proposed design and implementation of the proposed Project. This in turn requires an adequate foundation of information on the extent and degree of environmental effects due the proposed Project as well as the effects of the environment on the proposed Project to support a scientifically defensible assessment.

- 29. Hearing Order OH-4-2011 sets deadlines for the filing of information so that the review process can be fair and to provide certainty to all participants.
- 30. The deadlines for information requests from intervenors and the subsequent filing of written evidence by intervenors are based on a schedule that anticipated that Northern Gateway would provide information in a timely way.
- 31. The July 21, 2011 Haisla Nation Notice of Motion seeking to compel the provision of additional information was denied on the basis that the motion was premature and that the Haisla Nation could obtain this information through information requests.
- 32. Northern Gateway has refused to provide answers to the information requests identified herein, thereby rendering meaningless the JRP's assurance in its Ruling on the Haisla Nation's July 21, 2011 Notice of Motion, which was that the Haisla Nation can seek the required information through information requests. The Haisla Nation and/or other parties have sought the information through information requests and Northern Gateway has refused to provide it.
- 33. The JRP submitted an information request to Northern Gateway seeking a detailed response to concerns and purported deficiencies identified in Exhibit A1Z9Z4. This information request covered some of the information the Haisla Nation asked Northern Gateway be compelled to provide in its July 21, 2011 Notice of Motion.
- 34. The information response provided by Northern Gateway fails to respond to JRP Information Request No. 4.32 because it fails to respond or address the following critical concerns identified in Exhibit A1Z9Z4:
 - The value of a comparison of key design features and mitigation measures to compare past and current pipeline and marine terminal design, construction and operation practice;
 - More complete toxicological information on the various hydrocarbon components of the product to be carried in the pipelines;
 - The risk based rationale for the four hypothetical pipeline spill examples, as well as the nature of the receiving environment; and
 - d. A risk assessment of a marine terminal spill based on an analysis of risk factors based on the combination of timing of a spill relative to sensitive life stages, weather and oceanographic conditions and they type of hydrocarbon.
- 35. Northern Gateway also failed to respond to concerns set out in Exhibit A1Z9Z4 relating to pipeline risk assessment. Instead, Northern Gateway has disclosed that the pipeline risk assessment is ongoing and has listed work currently underway which would allow an assessment of risk. The reports that will be

- generated as part of this additional work are critical for the review of the proposed Project.
- 36. The Haisla Nation submitted a number of information requests seeking additional information from Northern Gateway which would allow the Haisla Nation to understand and assess the potential impacts and risks of the proposed Project. The information sought is required to understand the potential effects and consequences of, and therefore the risk associated with, a potential spill. This information must be available for the review of the proposed Project.
- 37. Northern Gateway's response to Haisla Nation Information Request No. 1 failed to respond to a number of specific information requests.
- 38. If the information request process is to be fair and meaningful it cannot be open to the proponent to refuse to answer legitimate and relevant questions. It is respectfully submitted that Northern Gateway should not be given the leeway to decide when it will answer questions and when it will not. The JRP must require full and adequate responses in areas where Northern Gateway has not provided sufficient information to enable a scientifically and technically valid assessment of the proposed Project risks and effects.
- 39. The failure of Northern Gateway to provide full and adequate responses to the Haisla Nation information requests makes the deadlines for the second round of information requests from intervenors and the subsequent filing of written evidence by intervenors unreasonable.
- 40. Further, Northern Gateway's attempt to delay the provision of information which the Haisla Nation says is critical for the review of the proposed Project until the detailed engineering phase, which is not anticipated to take place until after the JRP review has been completed, undermines the integrity of the review process.
- 41. Specifically, the responses to the Haisla Nation information requests identified herein are inadequate in one of two ways. They either fail to provide a full and adequate response, or they seek to defer the provision of information to the detailed engineering phase of the proposed Project, which is not anticipated to take place until after the JRP review has been completed.

PARTICULARS OF INADEQUATE RESPONSES

Failure to Provide Full and Adequate Response

Haisla Nation Information Request No. 1.6

- 42. In Haisla Nation Information Request No. 1.6, "Assessment of Project" the following is a partial list of the information requested by the Haisla Nation:
 - (a) Please provide the engineering specifics and other detailed information on each of the following:
 - A risk assessment of the pipeline and terminal portion of the Project and the level of risk being targeted (including a comparison of international standards for evaluating risk).

ii. The pipeline design and engineering specifics that will address geotechnical hazards including landslides and acid rock drainage.

- iv. Reference to the specific design codes and standards being followed and the specific subsections therein related to ii and iii.
- vii. Detailed characterization of bitumen, diluted bitumen, synthetic oil, and condensate.
- viii. All reports and studies on the corrosive nature of diluted bitumen including information on sulphur, sulphur-reducing bacteria, stress corrosion cracking, hydrogen-induced stress corrosion cracking, and corrosion failure that NGP has proposed, undertaken, commissioned or is aware of.
- x. Details on pipeline inspection procedures and equipment and related schedules for inspection that will be employed.
- xii. Details on the engineering and design specifications for the Kitimat Terminal external floating roof tanks.
- (b) Please provide the detailed studies prepared, undertaken or commissioned by NGP which look at the cumulative effects of the proposed Project and the Pacific Trails Pipeline.
- (c) Please provide the detailed mitigative measures planned by NGP concerning the cumulative effects of the proposed Project and Pacific Trails Pipeline. Please provide separate reports on the cumulative impacts of the NGP Project in the context of the Pacific Trails Pipeline project that address each of the following issues:
 - Pre-construction and construction activities
 - ii. Operation and Maintenance
 - iii. Emergency procedures
 - iv. Decommissioning
 - v. Abandonment

Haisla Nation Information Request dated August 25, 2011 (A2C4Q1), p. 6

Northern Gateway Response

- 43. In its response to Haisla Nation Information Request No. 1.6(a)(i), Northern Gateway has failed to identify the level of risk being targeted or a comparison of international standards for evaluating risk. This information is required because without knowing the level of risk being targeted it is impossible to determine the potential for a leak from the pipeline, and therefore impossible to determine whether the proposal presents an acceptable level of risk.
- 44. In its response to Haisla Nation Information Request No. 1.6(a)(ii), Northern Gateway references the Application but provides no new information. The information provided in the Application does not address geotechnical hazards, including landslides and acid rock drainage, in enough detail to allow the Haisla Nation to assess whether the proposed Project has been designed to an acceptable level of risk by addressing issues such as the disposal of rock that will accumulate through blasting, the potential for excess axial soil loading on buried pipelines from small or distant landslides, or the effects of acid rock potentially being exposed as a result of smaller, non-destructive landslides.
- 45. In its response to Haisla Nation Information Request No. 1.6(a)(iv), Northern Gateway has not provided the specific design codes and standards being followed with respect to pipeline design and engineering to address geotechnical hazards including landslides and acid rock drainage.
- 46. In its response to Haisla Nation Information Request No. 1.6(a)(vii), Northern Gateway has not provided detailed characterizations of bitumen, diluted bitumen, synthetic oil or condensate. This information is critical to understanding the effects of these substances, both on the materials of the projects, and on the effects on the environment in the event of a spill. The information provided in response to Haisla Nation information request No. 1.23(a) provides some physical characteristics of the pipeline products. The information provided, however, is insufficient to assess toxic effects on the environment or corrosive effects on the pipeline and associated facilities. A full chemical characterization is required.

NGP Response to Haisla Nation Information Request (A2E8Y0), p. 13

Haisla Nation Information Request No. 1.9

- 47. In Haisla Nation Information Request No. 1.9 "Ruptures and Leaks", the following is a partial list of information requested by the Haisla Nation:
 - (b) Please provide detailed engineering and design specifications and QA/QC procedures used for materials and during construction and operation in each of the above noted projects.

- (c) Referring to the table of selected spills above, please provide information on each of the incidents according to:
 - i. Nature of product discharged by Enbridge into the environment
 - ii. Regulatory consequences
 - iii. Lawsuits and current state of litigation
 - iv. Factors leading up to the spill

Haisla Nation Information Request dated August 25, 2011(A2C4Q1), p. 16

Northern Gateway Response

- 48. In its response to Haisla Nation Information Request No. 1.9(b), Northern Gateway refuses to provide the requested information. Enbridge's design and quality assurance/quality control procedures are important in terms of determining its history of design integrity and project responsibility. Without these requested details, the Haisla Nation is unable to determine if the proposed Project possesses acceptable risk-mitigating and safety features.
- 49. In its response to Haisla Nation Information Request No. 1.9(c) (i to iv), Northern Gateway again refuses to provide the requested information. Northern Gateway argues that information is publicly available. Northern Gateway also asserts that information provided in its other responses provide "an appropriate level of detail to assess Enbridge's spill history in the context of the Project". The Haisla Nation disagrees and seeks a full response to Haisla Nation Information Request No. 1.9(c)(i) to (iv). This information is required to understand whether necessary changes have been made after each spill, and how the factors leading to previous spills may be relevant to the proposed Project.

NGP Response to Haisla Nation Information Request (A2E8Y0), p. 25

Haisla Nation Information Request No. 1.10

- 50. In Haisla Nation Information Request No. 1.10 "Kalamazoo, Michigan Line 6B Spill July, 2010", the following is a partial list of information requested by the Haisla Nation:
 - (d) In a Detroit Free Press article published a week after the spill (document attached), it was revealed that warnings to Enbridge had been issued by both the Obama administration and the Department of Transportation (PHMSA):

The Obama administration had repeatedly warned Enbridge Energy Partners about safety issues along its Lakehead pipeline system. Is this report accurate? Please provide copies of all warning letters and all other related documentation in Enbridge's possession and control.

Enbridge company officials were called to Washington earlier in the year [2010] for a meeting on what it deemed "a series of major failures." Some of the

concerns specifically involved Line 6B. Is this report accurate? Please fully describe and provide all documentation relating to any such meeting.

The U.S. Department of Transportation -- which oversees oil pipelines through its Pipeline and Hazardous Materials Safety Administration, or PHMSA -- raised additional concerns about Enbridge's record. Is this report accurate? Please provide all documentation relating to concerns raised by the United States Department of Transport.

A senior Transportation Department official said the administration "repeatedly warned Enbridge in no uncertain terms that it needed to get its act together with regard to the safety of its Lakehead pipeline system." Is this report accurate? Please provide details and copies of all documentation relating to these warnings.

The official said PHMSA officials met with Enbridge senior leadership in February to tell them to "overhaul their entire approach to safety." Is this report accurate? Please provide all documents relating to this meeting.

- (e) Please provide detailed information concerning the findings of numerous anomalies along Line 6B.
- (f) Please explain why Enbridge failed to make the required repairs in a timely way.
- (I) With regard to EPA compliance, documents to Enbridge from the EPA since the spill include (documents attached):

October 5, 2010 - Notice of Disapproval regarding Enbridge's Supplement Resource Plans

June 17, 2011 - Notice of Oil Recovery Directive for Summer 2011

June 27, 2011 - Notice of EPA Determination of Enbridge Non-Compliance

June 28, 2011 - Notice of Potential Non-Compliance

Please detail all incidents of Enbridge's regulatory non-compliance pertaining to this incident and disclose all related documents.

- (o) Apart from compliance issues with spill clean-up, there are many sources who expressed displeasure with Enbridge's handling of the situation. The EPA's June 28, 2011 letter to Enbridge was titled: —Re: U.S. EPA Notice of Potential Non-compliance in response to the Administrative Order issued by U.S.EPA on July 27, 2010, pursuant to 311(c) of the Clean Water Act and Supplement to the Administrative Order issued by U.S.EPA on September 23, 2010 Inadequate Enbridge Response Management. In the letter, the EPA expressed concern about Enbridge's senior management on-site involvement of the Kalamazoo spill. Please disclose the letter and advise whether Enbridge contests the accuracy of any aspect of the letter. If so, what aspects are contested and why?
- (q) Over one year after the spill, the EPA's dedicated Enbridge spill website (www.epa.gov/enbridgespill) posts the following information:

- After a year of extensive cleanup work in the Kalamazoo River system, the U.S. Environmental Protection Agency has identified pockets of submerged oil in three areas covering approximately 200 acres that require cleanup. Work during the summer of 2011 is focused on:
 - Revisiting shoreline areas cleaned up in 2010 where winter weather and spring floods exposed previously unseen oil or spill impacts.
 - Recovering pockets of submerged oil in the sediment. EPA has identified three major submerged oil areas including the delta leading into Morrow Lake.

Please provide copies of all studies, reports, correspondence or the documentation concerning the impacts and effects of this major spill of diluted bitumen. Please provide a detailed explanation of the implications that this spill, and the events occurring before and after the spill, have for the transport of the same substance by way of the NGP Project.

- (r) Please provide a detailed description of what Enbridge's QA/QC procedures were prior to the Kalamazoo, Michigan spill.
- (v) Please provide each inspection report, by Enbridge personnel as well as by regulatory inspectors, which found anomalies along Line 6B prior to the rupture.
- (aa) Please provide a detailed log of the number of times that Line 6B has registered false positives and the ensuing response both by SCADA and by operators.
- (gg) Please provide all correspondence between Enbridge and regulatory agencies after the July 26, 2010 spill, as well as the current status of any outstanding infractions.

Haisla Nation Information Request dated August 25, 2011(A2C4Q1), p. 19

Northern Gateway Response

- 51. In its response to Haisla Nation Information Request No. 1.10(d), Northern Gateway does not provide any of the requested information and indeed, does not even attempt to answer the questions posed.
- 52. In its response to Haisla Nation Information Request No. 1.10(I), Northern Gateway has not provided the requested details of Enbridge's regulatory non-compliance pertaining to the Line 6B spill. The response from Northern Gateway points to the various websites which provide only cursory, and not detailed, incident information. It is important to obtain this information so that the Haisla Nation can understand all aspects of the catastrophic spill along Line 6B and to determine whether similar risks have been addressed in the proposed Project.
- 53. In its response to Haisla Nation Information Request No. 1.10(o), Northern Gateway has failed to provide a copy of the September 23, 2011 letter.

- 54. In its response to Haisla Nation Information Request No. 1.10(q), Northern Gateway has not provided any copies of studies, reports, correspondence or the documentation concerning the impacts and effects of this major spill of diluted bitumen, and has not provided a detailed explanation of the implications that this spill, and the events occurring before and after the spill, have for the transport of the same substance by way of the proposed Project.
- 55. In its response to Haisla Nation Information Request No. 1.10(r), Northern Gateway states that the request lacks sufficient specificity for Northern Gateway to be able to provide response. It is clear from the context of this information request that the information sought was Enbridge's QA/QC procedures for Line 6B prior to the Line 6B spill. Further, there was nothing preventing Enbridge from contacting the Haisla Nation directly to seek clarification. Northern Gateway's failure to respond to this Information Request is unreasonable. It is important to obtain this information so that the Haisla Nation may understand all aspects of the catastrophic spill along Line 6B and determine whether similar risks have been addressed in the proposed Project.
- 56. In its response to Haisla Nation Information Request No. 1.10(s), Northern Gateway advises that the National Transportation Safety Board ("NTSB") has advised Enbridge not to comment on any specific details relating to the July 2010 Line 6B spill in Marshall, Michigan, which is still the subject to an NTSB investigation. It is important to understand the details of the July 2010 Line 6B spill in Marshall, Michigan, in order to assess the probability of a similar spill occurring along the proposed pipeline and the ability of Northern Gateway to respond and mitigate impacts and effects of such a spill.
- 57. In its response to Haisla Nation Information Request No. 1.10(v), Northern Gateway states that the request lacks sufficient specificity for Northern Gateway to be able to provide a response. The Haisla Nation disagrees with this view. The information request, although potentially requiring a long and detailed response, was clear. Further, there was nothing preventing Enbridge from contacting the Haisla Nation directly to seek clarification if it indeed thought clarification was necessary. Northern Gateway's failure to respond to this information request is unreasonable.
- 58. In its response to Haisla Nation Information Request No. 1.10(aa), Northern Gateway states that the request lacks sufficient specificity for Northern Gateway to be able to provide a response. The Haisla Nation disagrees with this view. The information request, although potentially requiring a long and detailed response, was clear. Further, there was nothing preventing Enbridge from contacting the Haisla Nation directly to seek clarification. Northern Gateway's failure to respond to this information request is unreasonable. It is important to understand the potential danger of false positive readings when pipelining diluted bitumen, and therefore information on the number of times this had occurred along Line 6B must be provided.

59. In response to Haisla Nation Information Request No. 1.10(gg), Northern Gateway has advised that public information is available on various websites. This is not an adequate response to this information request.

NGP Response to Haisla Nation Information Request (A2E8Y0), p. 31

Haisla Nation Information Request No. 1.11

- 60. In Haisla Nation Information Request No. 1.11 "Wisconsin Spill February, 2007", the following is a partial list of information requested by the Haisla Nation:
 - (a) Please provide documented details of the fines accrued by Enbridge by the Wisconsin Department of Justice for each of its environmental law violations.

Haisla Nation Information Request dated August 25, 2011(A2C4Q1), p. 27

Northern Gateway Response

61. In response to Haisla Nation Information Request No. 1.11, Northern Gateway has acknowledged that the Wisconsin Department of Justice assessed fines against Enbridge in 2009, but failed to provide any details of those fines. This response is therefore deliberately incomplete and evasive. It is important to understand the steps taken under US legislation to enforce compliance with regulations, in order to determine whether the legislation applicable to the proposed Project is adequate to address potential compliance issues.

NGP Response to Haisla Nation Information Request (A2E8Y0), p. 43

Haisla Nation Information Request No. 1.22

- 62. In Haisla Nation Information Request No. 1.22 "Pipeline Design and Materials", the following is a partial list of information requested by the Haisla Nation:
 - (a) Please provide detailed information regarding the design methods that will be used to assess additional loadings of landslides and seismic conditions.

Haisla Nation Information Request dated August 25, 2011(A2C4Q1), p. 36

Northern Gateway Response

63. In response to Haisla Nation Information Request No. 1.22(a), Northern Gateway has not provided any detailed information regarding the design methods that will be used to assess additional loadings of landslides and seismic conditions. Northern Gateway has stated where areas of potential hazards cannot be avoided, "methods such as those outlined in the American Lifelines Alliance will be used to estimate additional loadings on the pipelines." This response is completely inadequate from every perspective and does not provide enough detail for the Haisla Nation to assess whether the unique design challenges have been acknowledged and will be addressed.

NGP Response to Haisla Nation Information Request (A2E8Y0), p. 77

Haisla Nation Information Request No. 1.23

- 64. In Haisla Nation Information Request No. 1.23 "Pipeline Product Characterization", the following is a partial list of information requested by the Haisla Nation:
 - (p) Please provide detailed information, including human health and ecological toxicity studies, on the diluent(s) to be used. If the diluent will vary, this too must be detailed in terms of how and when, and additional human health and ecological toxicity studies must be supplied.
 - (q) Please provide information on how the detailed design of the pipeline, appurtenances, storage facilities and marine terminal take into the account the properties of bitumen, including increased acidity, particulate matter and sulphur content.
 - (r) Please provide a detailed description of the heavy metal component of bitumen.
 - (u) Does NGP anticipate that precipitation of solids will occur in the diluted bitumen pipeline or the diluted bitumen storage tanks? If so, provide details.

Haisla Nation Information Request dated August 25, 2011(A2C4Q1), p. 39

Northern Gateway Response

- 65. In its response to Haisla Nation Information Request No. 1.23(p), Northern Gateway has failed to provide any of the requested information. The request sought specific information to allow for an assessment of the effects of the product on the pipeline materials and on the environment, should a spill occur.
- 66. In its response to Haisa Nation Information Request No. 1.23(q), Northern Gateway has provided a brief and overly general response that does not provide any detailed information about the design of the pipeline, appurtenances, storage facilities or the marine terminal. The answer is inadequate.
- 67. In its response to Haisla Nation Information Request No. 1.23(u), Northern Gateway has acknowledged that precipitation of solids is indeed anticipated, but has not provided any details beyond a general reference to "Enbridge's current operating standards and maintenance processes". This answer is not responsive to the question.

NGP Response to Haisla Nation Information Request (A2E8Y0), p. 81

Haisla Nation Information Request No. 1.24

- 68. In Haisla Nation Information Request No. 1.24 "Corrosive Nature of Diluted Bitumen", the following is a partial list of information requested by the Haisla Nation:
 - (h) Only six years after construction of a crude oil pipeline in Texas, microbial and internal corrosion forced the replacement of 1,520 metres of pipe (United Pipelines Systems, 2005, document attached). Please provide NGP's analysis of this incident and how it fits with NGP's assertion that it will not be transporting "hydrocarbons containing significant corrosive substances".

Haisla Nation Information Request dated August 25, 2011(A2C4Q1), p. 42

Northern Gateway Response

69. In its response to Haisla Nation Information Request No. 1.24(h), Northern Gateway does not address the question posed and does not provide the requested analysis. It is insufficient for Northern Gateway simply to re-state its position on diluted bitumen being "fundamentally similar to conventional heavy crude oils" as a way of avoiding answering a question aimed at assessing the potentially corrosive nature of the products Northern Gateway intends to transport, and how this affects pipeline integrity.

NGP Response to Haisla Nation Information Request (A2E8Y0), p. 88

Haisla Nation Information Request No. 1.36

- 70. In Haisla Nation Information Request No. 1.36 "External Floating-Roof Tanks", the following is a partial list of information requested by the Haisla Nation:
 - (a) Please provide the detailed rationale for including external floating-roof tanks in the Project.

Haisla Nation Information Request dated August 25, 2011 (A2C4Q1), p. 58

Northern Gateway Response

71. In its response to Haisla Nation Information Request No. 1.36(a), Northern Gateway has provided an inadequate response that does not supply the detailed rationale. The climate and soil at the proposed site of the Kitimat Terminal render the selection of storage tank of particular importance. The Haisla Nation needs enough information to assess the how Northern Gateway determined that external floating-roof tanks are suitable for use in this location. Northern Gateway must be required to answer properly.

NGP Response to Haisla Nation Information Request (A2E8Y0), p. 122

Haisla Nation Information Request No. 1.37

- 72. In Haisla Nation Information Request No. 1.37 "Use of Double-Hulled Tankers", the following is a partial list of information requested by the Haisla Nation:
 - (c) Please provide reports or studies that show the relative spill risk for single hull versus double hulls when the product being transported is diluted bitumen.
 - (e) Please provide reports or studies that show the relative spill risk for single hulls versus double hulls when the product being transported is synthetic crude.

Haisla Nation Information Request dated August 25, 2011 (A2C4Q1), p. 59

Northern Gateway Response

73. In its response to both Haisla Nation Information Request No. 1.37(c) and 1.37(e), Northern Gateway has referred the Haisla Nation to Northern Gateway's response to Coastal First Nations Information Request No. 1.5(c). Coastal First Nations Information Request No. 1.5(c) seeks a detailed assessment of the corrosive potential for diluted bitumen to corrode oil tankers, to which Northern Gateway has simply responded that "Northern Gateway will ensure that the tankers calling at Kitimat will be appropriately classed for the cargoes they carry". This sort of cursory response is disrespectful to the First Nations within whose territories Northern Gateway proposes to operate. In addition, this is an inadequate response to Haisla Nation Information Request Nos. 1.37(c) and (e), as well as to Coastal First Nations Information Request No. 1.5(c).

NGP Response to Haisla Nation Information Request (A2E8Y0), p. 127

Haisla Nation Information Request No. 1.38

- 74. In Haisla Nation Information Request 1.38 "Use of Fish for Oil Spills in Other Ecosystems", the following is a partial list of information requested by the Haisla Nation:
 - (c) For the Kalamazoo River, please compare the nature of the oil spilled to the diluted bitumen, condensate, and synthetic oil that may be shipped in the NGP pipeline, and describe the behaviour of the oil as it is spread and weathered, the extent and duration of sediment contamination, and the results of any studies on toxicity to fish or impacts on fish populations.
 - (d) For the Deepwater Horizon, please compare the oil spill response capability in the US Gulf Coast (i.e., the amount, quality, and availability of equipment, vessels, and industry and government expertise) to that available for responding to spills into the Kitimat River within 24 hours of the spill.

Haisla Nation Information Request dated August 25, 2011(A2C4Q1), p. 61

Northern Gateway Response

- 75. In its response to Haisla Nation Information Request No. 1.38(c), Northern Gateway has refused to provide the requested comparison between the oil spilled in the Kalamazoo River and the nature of the products to be shipped in the proposed Northern Gateway pipeline. Northern Gateway has also failed to describe how the oil behaved as it spread and weathered in the Kalamazoo River. Further, Northern Gateway's response stated that "... there is no indication that the incident impacted the fish population and no need to change the pre-existing fish consumption advisory". This statement contradicts earlier portions of the response which identifies a number of studies that are being conducted, as well as the response to Haisla Nation Information Request No. 1.10(dd), which stated that "the effects of the Line 6B incident on the environment are being assessed by designated trustees of the impacted natural resources to determine the need for remediation or reparations. That assessment is ongoing at this time".
- 76. In its response to Haisla Nation Information Request No. 1.38(d), Northern Gateway has refused to provide the requested comparison, stating that it is not relevant. The Haisla Nation disagrees. It is important to understand whether the proposed oil spill response capability in Kitimat is it likely to consist of sufficient resources that will be available in a timely fashion to deal with a spill. The Deepwater Horizon incident provided a clear example of the difficulty in responding to a spill even under ideal conditions where oil spill response resources are abundant and sophisticated, and is therefore an important source of information.

NGP Response to Haisla Information Nation Request (A2E8Y0), p. 130

Haisla Information Request No. 1.39

- 77. In Haisla Nation Information Request No. 1.39,"Pine River Spill", the Haisla Nation requested information about the Pine River spill, including:
 - (a) Copies of the documents by Baccante 2000, Alpine 2001, Pembina 2001, Pennart et al. 2004; and others relied on in NGP's discussion of the Pine River spill.
 - (b) An assessment of whether the Pine River is similar to or different from the Kitimat River.
 - (c) to (l) Details on impacts of the Pine River spill.

Haisla Nation Information Request dated August 25, 2011 (A2C4Q1), p. 62

Northern Gateway Response

- 78. In its response to Haisla Nation Information Request No. 1.39(a), Northern Gateway failed to provide copies of or identify where the requested documents may be accessed.
- 79. In its response to Haisla Nation Information Request No. 1.39(b), Northern Gateway has not provided a response at all. It is important to understand the similarities or differences between the Pine River and the Kitimat River, in order to incorporate knowledge acquired as a result of the Pine River spill in to the approach proposed for the proposed Project.
- 80. In its response to Haisla Nation Nos. 1.39(c) to (l), Northern Gateway has not provided a response, but has stated that it will do so when it has prepared a summary of a detailed account of the scientific information available on the Pine River Spill. As of the filing of this Motion, this additional information has not been provided.

NGP Response to Haisla Nation Information Request (A2E8Y0), p. 135

Haisla Nation Information Request No. 1.42

81. In Haisla Nation Information Request No. 1.42 "Freshwater Fish and Fish Habitat of the Kitimat River", the following is a partial list of information requested by the Haisla Nation:

Fish Species:

- (a) Please define the size and nature of the fisheries resources at risk in the Kitimat River, in terms of the abundance of each species present during one or more of their life stages.
- (c) Please provide information on the productivity of each species, and their relative value from a sports, commercial, or cultural perspective.
- (e) Please provide information on which life stages of fish are the most sensitive to oil exposure, and why. Please support this response with a literature survey to avoid the contradictions in Vol 7B among statements that "eggs and larvae", "juveniles", and "emergence in spring" are most sensitive.
- (f) P. 7-25: Please provide additional information on why the stock of sockeye that spawns near Hunter Creek is unique, the consequences to this stock of toxicity to adults, to eggs and embryos, and to juveniles, and appropriate remedial measures, if any.

Habitat:

(b) Please describe which part of the river each species uses at each life stage, including migration routes.

- (c) Please identify and map critical habitat, including the spawning shoals of all the species of fish that use the river for reproduction (e.g. various species of salmon and trout, eulachon, Pacific lamprey, forage species).
- (d) Please provide information on which of these habitats would be affected by an oil spill, and to what extent.

Haisla Nation Information Request dated August 25, 2011 (A2C4Q1), p. 67

Northern Gateway Response

Fish Species:

- 82. In its responses to Haisla Nation Information Request Nos. 1.42(a) and (c), Fish Species, Northern Gateway referred to the Application, "Freshwater Fish and Fish Habitat" TDR, and the "Marine Fisheries" TDR. No new information was provided. Northern Gateway has not provided information on the size and nature of the fisheries resource, the relative abundance of each species at each life stage or the productivity and value of fisheries in the river. Most of the information provided was limited to the marine environment. These responses are therefore inadequate.
- 83. In its response to Haisla Nation Information Request No. 1.42(e), Fish Species, Northern Gateway refers to its response to Haisla Nation Information Request No. 1.38. This response does not address the relative sensitivities of each fish life stages to oil exposure. This response is therefore inadequate, and fails to provide information relevant to assessing potential effects of the proposed Project.
- 84. In its response to Haisla Nation Information Request No. 1.42(f), Fish Species, Northern Gateway repeated information from its Application. Northern Gateway has not provided an assessment of the consequences to the unique stock of Hunter Creek sockeye of toxicity to adults, to eggs and embryos, and to juveniles. The response is therefore inadequate, and fails to provide information relevant to assessing potential effects of the proposed Project.

Habitat:

85. In its response to Haisla Nation Information Request Nos. 1.42(b) to (d), Habitat, Northern Gateway has not provided the information, stating that it is not available at this time. This information is required to understand the potential effects and consequences of, and therefore the risk associated with, a potential spill. This response is therefore inadequate, and fails to provide information relevant to assessing potential effects of the proposed Project.

NGP Response to Haisla Nation Information Request (A2E8Y0), p. 146

Haisla Nation Information Request No. 1.44

- 86. In Haisla Nation Information Request No. 1.44 "Distribution of Oil in the Kitimat River", the following is a partial list of information requested by the Haisla Nation:
 - (a) All hypothetical spills described in the application occur in summer when "environmental effects would be greatest" (p. 9-23). Please explain this statement in detail and provide an equivalent analysis for other seasons.
 - (b) Please describe the spread of oil in winter in relation to snow and ice, and describe how oil would be recovered under these conditions.
 - (c) Please provide detailed analyses of the extent of contamination of water, stream banks, vegetation, gravel bars, and bed sediments where fish spawn during each season under different flow regimes.
 - (f) The transit time of an oil spill from Hunter Creek to the estuary of the Kitimat River was estimated to be less than 24 hours. Please provide information on the extent of weathering in summer at high flow with temperatures of 15°C or greater, and in winter with low flows, but lower temperatures, and indicate how this would affect transit times, distribution of oil, and the nature of the oil deposited on river banks and in sediments.
 - (g) Please provide an analysis of the primary routes of exposure for different life stages of fish (e.g. direct uptake of compounds across the gills, food chain, direct contact with oil in sediments, exposure of eggs to contaminated interstitial waters).

Haisla Nation Information Request dated August 25, 2011 (A2C4Q1), p. 71

Northern Gateway Response

- 87. In its response to Haisla Nation Information Request No. 1.44(a), Northern Gateway has stated that "Seasonal differences in spill response requirements and potential environmental consequences will be addressed during the development of the Pipeline Oil Spill Response Plan". This information is required to understand the potential effects and consequences of, and therefore the risk associated with, a potential spill. This information must be available for the review of the proposed Project. This response is therefore inadequate.
- 88. In its response to Haisla Nation Information Request No. 1.44(b), Northern Gateway referred to it "General Oil Spill Response Plan", which, as its title indicates, is general and does not address specific environmental conditions. Northern Gateway has not provided any information on potential ice and snow conditions throughout the reach of the Kitimat and its tributaries that may be subject to spilled oil. This information is required to understand the potential effects and consequences of, and therefore the risk associated with, a potential spill. This information must be available for the review of the proposed Project. This response is therefore inadequate.

- 89. In its response to Haisla Nation Information Request No. 1.44(c), Northern Gateway has provided no new information and has refused to provide a detailed analysis of the extent of contamination resulting from a spill in different seasons. This information is critical for the Haisla Nation to understand the nature and size of potential risks to the Kitimat River ecosystem. This information must be available for the review of the proposed Project. This response is therefore inadequate.
- 90. In its response to Haisla Nation Information Request No. 1.44(g), Northern Gateway referred back to the Application. The Application, and therefore this response, does not address the question about the different routes of exposure of fish to oil. No new information was provided and the request remains unanswered. This information must be available for the review of the proposed Project. This response is therefore inadequate, and fails to provide information relevant to assessing potential effects of the proposed Project.

NGP Response to Haisla Nation Information Request (A2E8Y0), p. 157

Haisla Nation Information Request No. 1.46

- 91. In Haisla Nation Information Request No. 1.46 "Contamination of Sediments by Spilled Oil", the following is a partial list of information requested by the Haisla Nation:
 - (a) Please provide information on the anticipated spread and fate of the oil in the Kitimat River at high, medium, and low flow rates, including how turbulence might entrain oil into water and how hyporheic flow would carry oil into sediments.
 - (b) Explain the distribution and effects of oil that sinks and/or mixes with sediments. Also explain how the sinking tendency of oil would influence exposure and toxicity of fish embryos buried in sediments to residual oil.
 - (c) For each of diluted bitumen, condensate and synthetic crude oils, please estimate the proportion of spilled oil that would be entrained in sediments under different flow and temperature scenarios.

Haisla Nation Information Request dated August 25, 2011 (A2C4Q1), p. 75

Northern Gateway Response

- 92. In its response to Haisla Nation Information Request No. 1.46(a), Northern Gateway has failed to provide any site-specific detailed information. This information is required to understand the potential effects and consequences of, and therefore the risk associated with a potential spill. This response is therefore adequate.
- In its responses to Haisla Nation Information Request Nos. 1.46(b) and (c),
 Northern Gateway has made some general statements but has failed to provide

the detailed information requested. This information is required to understand the potential effects and consequences of, and therefore the risk associated with a potential spill.

NGP Response to Haisla Nation Information Request (A2E8Y0), p. 165

Haisla Nation Information Request No. 1.47

- 94. In Haisla Nation Information Request No. 1.47 "Acute and Chronic Effects of Oil Exposure", the following is a partial list of information requested by the Haisla Nation:
 - (d) Please provide a summary of what is known in terms of mechanisms of toxicity that cause toxic effects (metabolism of PAH in fish versus invertebrates, as well as transfer through the food chain).

Haisla Nation Information Request dated August 25, 2011 (A2C4Q1), p. 76

Northern Gateway Response

95. In its response to Haisla Nation Information Request No. 1.47(d), Northern Gateway has replied that it "is impractical to synthesize [literature on mechanisms of toxicity] at length here". However, references to such literature are missing from the Application. While the DiToro models referred to are useful for estimating the *acute lethality* of spilled oils with different chemical composition, these models do not encompass a wide array of other potential responses, including impaired immune responses, impaired sexual maturation and reproduction, and chronic toxicity to fish embryos. This information is an essential component of any risk assessment, and must be made available at the proposed Project review stage.

NGP Response to Haisla Nation Information Request (A2E8Y0), p. 173

Haisla Nation Information Request No. 1.49

- 96. In Haisla Nation Information Request No. 1.49 "Life Stage and Species Sensitivities", the following is a list of information requested by the Haisla Nation:
 - (a) Please provide details on specific effects of oil on different life stages of fish, for as many species as possible.
 - (b) Please describe the toxicity of different hydrocarbons in terms of EC50s and LOEC/NOECs for comparisons.
 - (c) Where data are available, please express toxicity in terms of "total petroleum hydrocarbons" and "total PAH".
 - (d) Please provide a summary of the spawning and emergence times for each fish species in the Kitimat River.

Haisla Nation Information Request dated August 25, 2011 (A2C4Q1), p. 78

Northern Gateway Response

- 97. In its response to Haisla Nation Information Request Nos. 1.49(a) to (c), Northern Gateway has made no attempt to respond to the requests. Instead, Northern Gateway provided several general references which had little to do with the request. The references provided (DiToro et al) report models for acute lethality of individual compounds, not sublethal or chronic effects, and certainly not for all the constituents of whole oil. This information is required to understand the potential effects and consequences of, and therefore the risk associated with, a potential spill. This response is therefore inadequate.
- 98. In its response to Haisla Nation Information Request No. 1.49(d), Northern Gateway has only provided information for 9 of the reported 17 fish species found in the Kitimat River. This does not provide a complete picture of the potential effects and consequences of, and therefore the risk associated with, a potential spill, and is therefore inadequate.

NGP Response to Haisla Nation Information Request (A2E8Y0), p. 178

Haisla Nation Information Request No. 1.52

- 99. In Haisla Nation Information Request No. 1.52, "Long-Term Consequences of Toxicity", the Haisla Nation requested information that included the following:
 - (a) If recruitment of one year class of a given salmon species is wiped out by an oil spill, please indicate the time required for the population to recover. Also indicate whether oil will persist such that subsequent year classes will be exposed.
 - (b) For each salmon species in the Kitimat River and its tributaries, please indicate how much impairment of recruitment can be sustained before the fishery collapses.
 - (c) Please describe the ecological, social, and economic costs of toxicity.
 - (d) Based on fish closures the followed oil spills in other ecosystem (e.g. Wabamun Lake), please provide a review of what determines a closure for specific fisheries and how long they are closed.

Haisla Nation Information Request dated August 25, 2011 (A2C4Q1), p. 81

Northern Gateway Response

100. In its response to Haisla Nation Information Request Nos. 1.52(a) to (d), Northern Gateway refers the Haisla Nation to Northern Gateway's response to Gitxaala Information Request No. 1.10.5.1. Northern Gateway's response to Gitxaala Information Request No. 1.10.5.1 does not address or provide a response to any of Haisla Nation Information Request No. 1.52(a) to (d). The information

requested by the Haisla Nation is required to assess the potential impacts of a spill of hydrocarbons into the Kitimat River or its tributaries, and is necessary for the review of the proposed Project. Northern Gateway has failed to provide this information.

NGP Response to Haisla Information Request (A2E8Y0), p. 185

Haisla Nation Information Request No. 1.56

- 101. In Haisla Nation Information Request No. 1.56 "Recovery of Fish and Fish Habitat", the following is a partial list of information requested by the Haisla Nation:
 - (a) Please indicate when the "Habitat Compensation Program" will be completed and whether it will be reviewed before construction begins.

Haisla Nation Information Request dated August 25, 2011 (A2C4Q1), p. 84

Northern Gateway Response

102. In its response to Haisla Nation Information Request No. 1.56(a), Northern Gateway referred back to its Application and implied that habitat compensation will not be fully considered until construction is about to begin, i.e., only after approval of pipeline construction. This issue should be addressed at the application stage, since it is critical to understanding the effectiveness of proposed mitigation and the potential for net losses of valued fisheries. Northern Gateway provided no new information and the request remains unanswered.

NGP Response to Haisla Nation Information Request (A2E8Y0), p. 193

Haisla Nation Information Request No. 1.62

- 103. In Haisla Nation Information Request No. 1.62, "Exposure Through Air", the following is a list of information requested by the Haisla Nation:
 - (a) Please provide information on the specific VOCs and their amounts that are projected to be released into the air masses of Upper Kitimat Arm in the course of normal operations of the project, and include information for both the condensate as well as the diluted bitumen.
 - (b) Please provide information on the specific VOCs and their amounts that are projected to be released into the air masses of Upper Kitimat Arm in the event of spills of either condensate or the diluted bitumen.
 - (c) Please provide recent toxicological information on the effects of prolonged inhalation of VOCs on the health of humans and air-breathing biota, as well as the effects of acute inhalation of very high levels of VOCs in humans and biota.

Haisla Nation Information Request dated August 25, 2011 (A2C4Q1), p. 92

Northern Gateway Response

- 104. In its response to Haisla Nation Information Request No. 1.62(a), Northern Gateway failed to provide any specific information about fugitive emissions from condensate and diluted bitumen, responding instead that such emissions are assumed to be not significant. Attachment 1.62(a) provides information on emissions from ship engine operations, but not from cargo. Northern Gateway has failed to provide the requested information.
- 105. In its response to Haisla Nation Information Request No. 1.62(b), Northern Gateway has failed to provide the information. Northern Gateway relies on the fact that it has concluded that the probability of a spill is low and that it will do its best to respond quickly in the event there is a spill to conclude that it is not necessary to consider air emissions in the event of a spill. The Haisla Nation disagrees that air emissions in the event of a spill are not a relevant component of a risk assessment for the proposed Project. This information is required to understand the potential effects and consequences of, and therefore the risk associated with, a potential spill. Northern Gateway's response is therefore inadequate.
- 106. In its response to Haisla Nation Information Request No. 1.62(c), Northern Gateway has referred to its response to Haisla Nation Information Request No. 1.62(b). Given the inadequacy of this response, Northern Gateway's response to Haisla Nation Information Request No. 1.62(c) is also inadequate. Northern Gateway should be required to provide the requested information.

NGP Response to Haisla Nation Information Request (A2E8Y0), p. 215

Haisla Nation Information Request No. 1.67

- 107. In Haisla Nation Information Request No. 1.67, "Effects of Hydrocarbons on Fish, Fish Habitat and Marine Fisheries Management", the following is a list of information requested by the Haisla Nation:
 - (d) Has information showing that pelagic fish species can show evidence of exposure to oil at sites located several hundred miles away from a spill been considered, and if so, how? If such information has not been considered, why not?

Haisla Nation Information Request dated August 25, 2011 (A2C4Q1), p. 97

Northern Gateway Response

108. In its response to Haisla Nation Information Request No. 1.67(d), Northern Gateway has failed to respond to the request. Northern Gateway's response identifies factors to be considered, but does not state whether it has considered these factor or how. Northern Gateway's response is therefore inadequate.

NGP Response to Haisla Nation Information Request (A2E8Y0), p. 232

Studies Incomplete

Haisla Nation Information Request Nos. 1.43, 1.46, 1.48, and 1.50

109. In Haisla Nation Information Requests Nos. 1.43(b), 1.43(d), 1.46(e), 1.48(a), 1.50(e), the Haisla Nation requested detailed information about the chemical composition of the products Northern Gateway intends to transport in the pipelines.

Haisla Nation Information Request dated August 25, 2011 (A2C4Q1)

110. In response to these information requests, Northern Gateway has disclosed that this information is not available, has advised that it has initiated supplemental chemical analysis of the hydrocarbons, as discussed in its response to Federal Government Information Request No. 100.

NGP Response to Haisla Nation Information Request (A2E8Y0)
NGP Response to Federal Government Information Request (A2E8J0)

111. The supplemental chemical analysis is critical to assessing and understanding the potential effects of a spill. Diluted bitumen and condensate are complex mixtures of chemical compounds. The individual compounds differ in their solubility, toxicity, mode of toxic action and how persistent they are in the environment. Some are acutely toxic to fish and wildlife and others are chronically toxic, causing prolonged effects to fish and wildlife. Different species and their life stages will vary in their sensitivity to different constituents. Determining the extent and degree of effects from a release of the products into the environment requires a thorough understanding of the chemical compounds and toxic constituents to assess the potential for significant adverse effects. As of the filing of this Motion, the supplemental chemical analysis had not been provided.

Haisla Nation Information Request Nos. 1.23, 1.43, 1.46, 1.48, 1.50, and 1.51

112. In Haisla Nation Information Request Nos. 1.23(i) to (j), 1.43(e), 1.46(d), 1.46(f), 1.48(b),1.50(a) to (c), and 1.51(a) the Haisla Nation requested information about potential health and environmental impacts and about ecological risks resulting from a hydrocarbon spill.

Haisla Nation Information Request dated August 25, 2011 (A2C4Q1)

113. In response to Haisla Nation Information Request Nos. 1.23(i) to (j), 1.43(e), 1.46(d), 1.46(f), 1.48(b), 1.50(a) to (c), and 1.51(a), Northern Gateway has acknowledged that it has not conducted all the required studies, and has advised

that it is preparing additional Human Health and Ecological Risk Assessments, as discussed in its response to Federal Government Information Request No. 118.

NGP Response to Haisla Nation Information Request (A2E8Y0) NGP Response to Federal Government Information Request (A2E8J0)

114. The additional Human Health and Ecological Risk Assessments are critical to assessing and understanding the potential effects of a spill. Diluted bitumen and condensate are complex mixtures of chemical compounds. The individual compounds differ in their solubility, toxicity, mode of toxic action and how persistent they are in the environment. Some of these compounds, such as benzene and benzo-a-pyrene, are carcinogenic. Recent events following the Kalamazoo, Michigan spill confirm that there were serious hazards to human health. Determining the extent and degree of effects from a release of the products into the environment requires a thorough understanding of the chemical compounds and toxic constituents to assess the potential for significant adverse effects to human health and the environment. As of the filing of this Motion, the additional Human Health and Ecological Risk Assessments had not been provided.

Information deferred to Detailed Engineering

- 115. In response to a number of information requests, Northern Gateway has stated that the information will not be generated or forthcoming until the detailed engineering phase of the proposed Project. This includes Northern Gateway's response to the following:
 - (a) Haisla Nation Information Request Information Request No. 1.6(a)(x) request for details on pipeline inspection procedures and equipment and related schedules for inspection that will be employed. This information is critical to the integrity of the pipeline and must be made available for adequate Project review.
 - (b) Haisla Nation Information Request Information No. 1.6(c) request for mitigation measures planned to address cumulative effects of the proposed Project and Pacific Trails Pipeline. This information is required in order to assess the risk and the potential impacts of the natural gas pipeline in close proximity to proposed pipeline. The construction phase of Pacific Trails Pipeline is likely to occur prior to the construction of the proposed Project. With the exception of accidents along a pipeline, the construction aspect of a project is the most invasive to the environment. As such, the newly-disturbed areas will be altered in ways which the Haisla Nation must be able to ensure have been taken into account by Northern Gateway. Information on mitigation measures is therefore required.

- (c) Haisla Nation Information Request No. 1.13(b) request for a detailed plan on how Northern Gateway pipelines spill risk will differ from the Keystone I pipeline which, in its first 6 months, has already had 4 leaks.
- (d) Haisla Nation Information Request No. 1.22(c) request for a description on Enbridge's "strain management plan".
- (e) Haisla Nation Information Request No. 1.22(e) request for the choice of pipeline wall thickness and a description of the pros and cons which led to the final decision of wall thickness for both the oil and the pipelines.
- (f) Haisla Nation Information Request No. 1.25(a) request for information on the potential for damage to pipelines by microbial corrosion and the precise pipeline design which addresses this issue. This information is critical to the integrity of the pipeline, specifically corrosion risk and must be made available for adequate Project review.
- (g) Haisla Nation Information Request No. 1.25(b) request for details on how hydrogen damage, including external coating damage, will be inspected for and monitored. Details should be provided concerning how effective monitoring for external coating damage will be carried out. This information is critical to the integrity of the pipeline and to the assessment of corrosion risk and must be made available for adequate Project review.
- (h) Haisla Nation Information Request No. 1.25(c) request for design information which addresses the potential for freeze/thaw cycling to damage external pipeline coatings, and the mitigation plan should such damage occur. This information is critical to the integrity of the pipeline and to the assessment of corrosion risk and must be made available for adequate Project review.
- (i) Haisla Nation Information Request No. 1.25(d) request for information on pipeline monitoring and inspection practices that will be employed to lessen or address sulphur damage to the pipelines. This information is critical to the integrity of the pipeline and to the assessment of corrosion risk and must be made available for adequate Project review.
- (j) Haisla Nation Information Request No. 1.25(e) request for information on the monitoring and inspection practices that will be employed to monitor and inspect for stress corrosion cracking. This information is critical to the integrity of the pipeline and to the assessment of corrosion risk and must be made available for adequate Project review.
- (k) Haisla Nation Information Request No. 1.25(f) request for a detailed plan for lowering the pipeline segments into the trench, and including a description of the trench bed preparation. This information is critical to the

- integrity of the pipeline and to the assessment of corrosion risk and must be made available for adequate Project review.
- (I) Haisla Nation Information Request No. 1.26(b) request for information on how the Cathodic Protection system for the pipeline will address the known potential in northern BC for geomagnetically-induced currents. This information is critical to the integrity of the pipeline and must be made available for adequate Project review.
- (m) Haisla Nation Information Request No. 1.26(c) request for information on spacing of Cathodic Protection monitoring stations. This information is critical to the integrity of the pipeline and must be made available for adequate Project review.
- (n) Haisla Nation Information Request No. 1.27(a) request for information on specific welding procedures and the detailed joining program for the type of steel to be used. This information is critical to the integrity of the pipeline and must be made available for adequate Project review.
- (o) Haisla Nation Information Request No. 1.27(d) request for a detailed commissioning plan. This is required to assess the environmental effects for the Project and must be made available for adequate Project review.
- (p) Haisla Nation Information Request No. 1.36(c) requesting information on how long-period motions will be characterized for computing the response of sloshing liquid in oil and condensate tanks. This information is critical to the integrity of the storage tanks and must be made available for adequate Project review.
- (q) Haisla Nation Information Request No. 1.36(d) requesting an in-depth description of the seismic analysis and design of floating roofs, including details of:
 - i. interaction between sloshing liquid and floating roof,
 - stresses induced in the deck due to geometric shortening,
 - iii. bending of pontoon due to vertical motion, and
 - iv. measures taken to prevent leaks in the floating roof.

This information is critical to the integrity of the storage tanks and must be made available for adequate Project review.

(r) Haisla Nation Information Request No. 1.36(e) requesting a clear and detailed explanation of how the nonlinear response associated with base uplifting and base sliding will be computed if load reduction factors are used in seismic design of storage tanks at the proposed Kitimat Terminal. This information is critical to the integrity of the storage tanks and must be made available for adequate Project review. (s) Haisla Nation Information Request No. 1.36(f) requesting a clear and detailed explanation of how the interaction between the foundation, structure and the fluid will be considered in seismic design of tanks. This information is critical to the integrity of the storage tanks and must be made available for adequate Project review.

Haisla Nation Information Nation Request dated August 25, 2011 (A2C4Q1) NGP Response to Haisla Nation Information Request (A2E8Y0)

- 116. Northern Gateway therefore seeks to defer a very wide range of issues to the "detailed engineering" phase of the project, without providing a logical rationale for doing so. For example, why should the cumulative effects of locating a bitumen pipeline beside a natural gas pipeline be characterized as a matter for detailed engineering? Why should information about potential pipeline damage from microbial corrosion and a discussion of pipeline design which addresses this issue be characterized as a matter for detailed engineering?
- 117. The information listed in paragraph 115 above is critical for the review of the proposed Project. If the information is not provided until the detailed engineering phase, which is not anticipated to take place until after the JRP review has been completed, the Haisla Nation, other parties, and the JRP will not be able to conduct a proper review of the proposed Project and potential risks and an assessment of the significance of environmental effects.

ORDER SOUGHT

- 118. The Haisla Nation respectfully requests the following relief:
 - an order that Northern Gateway must provide full and adequate response to those portions of Haisla Nation Information Request No. 1 identified herein by a fixed date;
 - an order that Northern Gateway must provide a full and adequate response to JRP Information Request No. 4.32 by a fixed date;
 - an order that the Northern Gateway pipeline risk assessment and supporting studies and reports be provided by a fixed date;
 - d. an adjournment of proceedings until Northern Gateway has provided the information required pursuant to paragraphs a to c, above;
 - e. an amendment to the Hearing Order that sets new and reasonable deadlines for information requests and written intervenor evidence, oral testimony and final hearings, once Northern Gateway has provided the all the information required pursuant to paragraphs a to c, above; and
 - f. such other relief as the Panel may consider appropriate in the circumstances.

119. The Haisla Nation further respectfully requests that the November 3, 2011 deadline for the second round of information requests from intervenors and government participants to Northern Gateway be extended until this Motion is heard, and that the JRP's ruling on this Motion set a new deadline which is either consistent with the relief sought in paragraph 118 above, or which provides the parties with a reasonable amount of time to file their information requests.

All of which is respectfully submitted this 28st day of October, 2011.

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