

## **LNG & Health Assessments**

### **Meeting Objective:**

Increased awareness among health agencies of upcoming LNG facilities, clarification of respective roles and responsibilities, and process to seek guidance on information requirements and policy framework related to health assessments

### **Participants**

- NHA – Barb Oke, Greg Thibault, Kim Menounos
- BCCDC – Tom Kosatsky
- MOH – Mike Zemanek
- HC – Gladis Lemus
- MOE (Victoria) – Warren McCormick, Natalie Suzuki
- MOE (Regions) – Ed Hoffman, Ian Sharpe, Ben Weinstein
- EAO – Scott Bailey
- Risk Sciences International – Greg Paoli (contractor)

### **The LNG Juggernaut (Scott Bailey)**

- Environmental Assessment Office (EAO) operates under BC Environmental Assessment Act
- Health stated specifically under act (one of 5 pillars)
- Projects trigger act when they exceed certain size
- Need EA certificate before they can proceed to permitting stage
- EAO – about 50 projects right now; 10 LNG-related – most in the north (this number may grow)
- In excess of \$50B capital involved with LNG (far outweighing other projects)
- Reorganized office to include 2 teams involved in LNG (one 50%, one 100%)
- Have about 1/3 of office staff working on LNG
- New Ministry of Natural Gas Development
- Struck regulatory working group – strategic issues group involving NR directors to identify barriers to regulatory process
- Normally strikes working group for each EA project, involving technical experts, to review work of proponent
- For LNG, have struck 2 working groups for pipelines and facilities
- Have gaps in the type of expertise that they need to handle massive wave of projects
- Wants to help find solutions to find the right expertise to help

- Other issue is timing of issues -- beginning Jan 2014, several projects in application review stage
- Mandated timelines (180 days) for application review
- Through series of meetings with proponent, make sure necessary information is there and appropriate
- Will write final assessment report, with recommendations
- Question re: role of setting terms of reference for assessments (work with working group throughout process) including application information requirements
- EA and permit can be done concurrently, overlapping or following (could be that health information is done at EA process, or done in more detail in secondary authorization process)

#### **Why are LNG facilities special and why health assessment framework needed? (Ian Sharpe)**

- New industry to BC that could be very large -- if we can get it right off the bat, will pay big dividends for human health
- Kitimat is confined airshed
- LNG terminals will cluster (e.g. Shell proposal in Kitimat very close to Rio Tinto Alcan (RTA) smelter; other 2 facilities within 16 km of downtown Kitimat; Prince Rupert similar clustering)
- Already existing emission sources and additional proposals for other activities with airborne emissions, with multiple contaminants
- Transportation sources cannot be ignored due to volume of shipping
- Secondary reservoir of contaminants through soil and water, which may result in health effects
- RTA analysis flagged need for careful scrutiny of potential effects
- Highly sensitized public; Kitimat-Terrace is many area of concern right now
- Looking for governance framework for how to mitigate emissions
- LNG is government priority
- Coastal First Nations (Gitgat) extremely concerned that they have early warning of whether AQ may affect human health prior to regulatory process, specifically, the cumulative impacts of multiple sources and multiple pollutants on air quality and health

#### **MOE's Role (Ben Weinstein)**

- MOE's role to set requirements under Environmental Management Act (EMA) to ensure discharges to environment do not cause pollution
- Oil & Gas Commission will be decision-maker for LNG authorizations (MOE Environmental Protection Division - EPD - will support)

- EPD's role in EA process to focus on parts leading to EMA permits
- Expertise – engineers, scientists and policy-related
- Lack expertise to speak to health risks – need to work with health agencies regarding this

#### Health Agency Roles

- NHA (Greg/Barb)
  - LNG is beyond their resources at this time
  - Difficult to bring forward a proposal where increased health risk
  - To look at LNG priority in isolation is challenging for them
  - May be in position to ask the right questions but may not be able to evaluate individual health assessments
  - Not just AQ that is of concern to NHA
- BCCDC (Tom)
  - Not staffed to do health assessments on a routine basis; in whole province, only one designated risk assessment specialist in Fraser Health
  - BC Environmental Health Policy Committee currently looking at role of environmental health in environmental projects, but early on in discussion
  - Kind of expertise to assess exposures and critically review toxicology just isn't present in BC, and if they start doing these, there will be expectation to continue reviewing these
  - Hiring consultants still requires staff component not present in Health Authorities in BC
- MOH (Mike) – Need to fill this gap; is a challenge to find people in that area (not just toxicology but also exposure)
- Health Canada (Gladis)
  - Health Canada has experience in developing application information requirements as well as guidance documents; can share some of their guidance documents;
  - Happy to provide technical expertise and peer reviews as appropriate; do have expertise in risk communication;
  - Do collaborate a lot with BCCDC – may be medium to long-term study related to cumulative effects
  - Federal government still trying to figure out how they deal with LNGs
- Re: policy framework
  - NHA could be involved (subject to ongoing discussions at more senior levels on resourcing/capacity issues)
  - Policy framework intended to set even set of expectations for all LNG proponents (and may be used elsewhere later for other applications)

- Ian working with MOE strategic policy branch to talk about policy issues at a July 18 workshop; will have a better sense of timing requirements after this workshop

#### **Wrap-up/Next Steps**

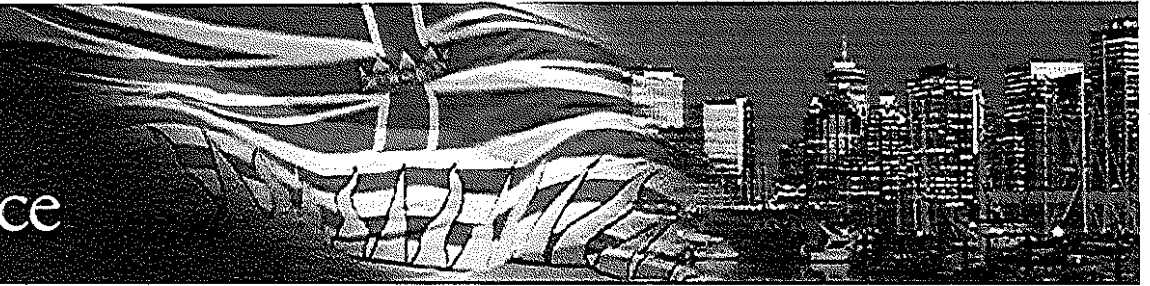
- Ian would like to reconvene group in near future, subject to more senior discussions involving health authority involvement



# **Agenda Item #3 – Overview of EA in BC**

**30 minutes**

Meeting between EAO and the BC Environmental Health Policy  
Advisory Committee Health Impact Assessment Working Group



# Purpose of Environmental Assessment

- Address a project's potential environmental, health, social, heritage & economic effects
- Identify ways to prevent, minimize or avoid adverse effects
- Fulfill Crown's legal duties to First Nations
- Ensure appropriate conditions are attached to the EA Certificate and conduct oversight on approved projects to ensure conditions are met.

## Key Issues/Trends

- At any given time, EAO is actively reviewing around 30 proposed projects, worth approximately \$35 billion in potential capital investment to the Province
- EAO currently has about 50 projects; 10 are LNG related
- LNG development is a major business driver
- Increasing public interest in EA decisions and access to information
- Implementing new substitution agreement with Canada – 5 substitution requests approved
- Focus on compliance and enforcement

## EAO Staffing/Financing

- Approximately 80 staff – located in Victoria
- 2/3 of staff work on project reviews
- 1/3 of staff work on policy, C&E, IT, and HR/administration
- EAO occasionally enters into contracts with third-party consultants where expertise is not available in-house (e.g. Socio-economic impact assessment)



## Working Groups

- Inter-governmental committee chaired by EAO for technical review and advice.
- Membership usually provincial, federal, local government and First Nations.
- Identifies issues and information requirements, works with proponent on issue resolution.

## Key Products or Activities that the Working Group Assists With

- Valued component scoping
- Application Information Requirements (AIR)
- Application screening
- Application review
- Development of mitigation measures
- Development of conditions
- Review of draft Assessment Report

Input & Issues Resolution

## Role of Proponent

- Provides all information about project. Proponents hire consulting firms (often qualified professionals) to gather required information and conduct technical studies.
- Consults with public and First Nations in pre-Application stage.
- Addresses issues raised in pre-Application and Application Review stages.



# **Agenda Item #4 – Health Assessment as part of EA**

**30 minutes**

Meeting between EAO and the BC Environmental Health Policy  
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## Process for Identifying Projects with an Increased Likelihood of Health Impacts

- Typically, there is a “health” chapter in most EAs. Content, quality, and depth of analysis varies.
- 2 types of issues of primary concern are:
  - Human health
  - Infrastructure and services required
- Generally, analysis should be more rigorous where:
  - Proximity to human population centres
  - Known air and water quality issues
- Assistance needed from health sector to develop triage process for identifying projects where detailed HIA is needed.





## Process for Scoping Health Issues, Selecting VCs, and Evaluating HIAs

Proponent  
collects  
information

EAO evaluates  
information with  
assistance from  
working group  
members.

1. General description of existing health conditions
2. Description of VCs
3. Baseline information and impact analysis for VCs
4. Proposed mitigations for potential impacts
5. Analysis of residual effects and their significance

Issues  
Scoping

Select Valued  
Components

Establish  
Boundaries

Describe  
Existing  
Conditions

Determine  
Potential  
Effects

Identify  
Mitigation  
Measures

Evaluate  
Residual  
Effects

Assess  
Cumulative  
Effects  
(as required)



## Process for Seeking Health Sector Participation on EAO WGs

- Input sought from:
  - Health Authorities
  - Ministry of Health
  - BC Centre for Disease Control
  - Health Canada
- When project begins EA, EAO emails these groups requesting participation. Often contacts people who have participated on WGs in the past or for other projects.
- EAO typically casts a wide net, because not clear what group has mandate to participate.

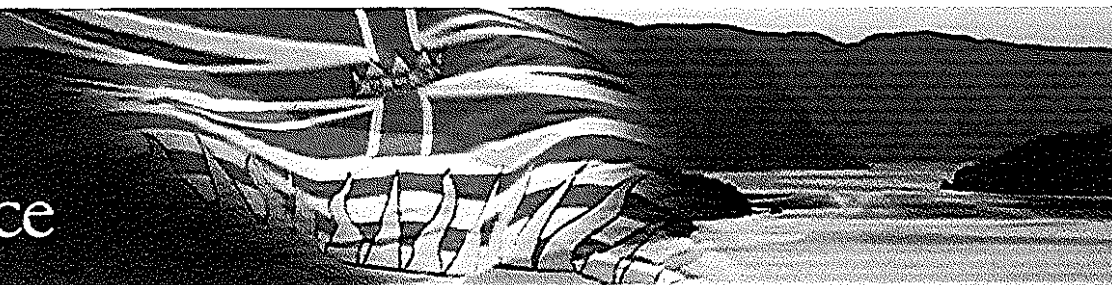


## Health Canada Participation on WGs

- HC member is typically one individual: Yota Hatziantoniou - A/Regional Environmental Assessment Coordinator.
- HC has been a valuable contributor on many projects. Typically provides comments related to wildlife or fish consumed by First Nations or impacts to drinking water resources.
- HC has guidance document for proponents undergoing federal EA. Can also be useful for BC. Document outlines EA considerations for potential health impacts.
- Anticipate HC participation changing to focus on Aboriginal health. HC has already terminated its involvement on a WG where the federal EA was terminated under CEAA 2012.

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## Adequacy of Health Participation on WGs

- EAO has been told that Health Authorities and BCCDC do not have capacity or expertise to participate in EAs.
- EAO is in need of health sector participation and input especially on projects in Northern BC, but also elsewhere.
- Timing is the imperative
  - LNG studies are underway now.
  - Completed studies are to be submitted in early 2014.