First Nation and Stakeholder concerns regarding environmental implications of accessing the coast of British Columbia

Douglas Ford, Communica Public Affairs Inc.
Pragmatic Solutions

Aboriginal and Public Consultation
Communications support
Stakeholder Information Management (SIM)

• We plan, manage and implement comprehensive consultations
• We manage and oversee SIM requirements
• We plan and execute special events – including public meetings
• We have extensive experience in this very specialized practice area
• We develop communication materials and provide support on development and implementation of communications strategies
• 25 resources – 11 years of operations!

Offices in Vancouver and Calgary
Experience

Diversity and Strength

• Gas processing facilities and well development
• LNG
• Pipelines and energy corridors: oil, natural gas, hydrogen, electricity
• Mining
• Coal bed gas development
• Municipal development planning and consultations
• Conventional power generation and transmission
• Renewable energy – including wind power
• Carbon Capture and Storage
Overview

Topics to explore

• What petroleum shipping traffic exists today

• What is being proposed in the future?
  • Current and proposed energy projects on coastal British Columbia (B.C.)

• Understanding the complex regulatory processes related to B.C. coastal development

• Examining barriers to effective First Nation and Stakeholder engagement

• Lessons learned and moving forward
What exists today?
Current B.C. Pipeline Infrastructure

Petroleum and Natural Gas:

- **Petroleum:**
  - An existing **Kinder Morgan** pipeline carries 300,000 barrels of oil per day to the west coast. With a proposed expansion, it will soon transport 850,000 barrels per day.
  - **Pembina Pipeline** covers 600 km in conventional lines in northern B.C.

- **Natural Gas:**
  - **Spectra Energy's** transportation system stretches from Fort Nelson, in northeast B.C. and Gordondale at the B.C./Alberta border, to the southern-most point at the B.C./U.S. border at Huntington/Sumas.
  - **PNG** transports natural gas through its Western system pipeline that stretches 1,180 km, starting near Summit Lake, B.C., to many west coast terminals including Prince Rupert, Port Edward and Kitimat.
Tanker Exclusion Zone and Current Tanker Traffic

There is no federal ban on oil tankers entering BC ports. For decades, oil tankers have entered the Port of Vancouver and at Kitimat. Both the federal and provincial governments, and their respective departments, have confirmed that tankers are currently able to enter BC waters and ports.

The only tanker routing measure in place on the coast of British Columbia is the Tanker Exclusion Zone (TEZ). The TEZ is a voluntary exclusion zone that was established in 1988 by way of an agreement between the U.S. and Canada Coast guards to keep moving tankers between Alaska and Washington state away from the BC coastline.

The Tanker Exclusion Zone does not apply to existing or future tanker traffic in BC.

"...I should clarify that the only tanker routing measure in place off the west coast of British Columbia is the Tanker Exclusion Zone (TEZ). The TEZ routing measure would not apply to tanker traffic originating from a port in British Columbia originating within the zone, including Prince Rupert or Kitimat."

Letter from former Liberal Minister of Transport, Jean Lapierre, August 2005.
Petroleum Products Handled at Port Metro Vancouver

- All Petroleum Products
- Crude Petroleum
- Gasoline
- Aviation & Jet Fuel
- Diesel & Fuel Oils
- Kerosene, Distillate & Coke
- Other Petroleum Products

<table>
<thead>
<tr>
<th>Metric Tonnes</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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<tbody>
<tr>
<td>All Petroleum Products</td>
<td>8,000,000</td>
<td>9,000,000</td>
<td>9,500,000</td>
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<td>Crude Petroleum</td>
<td>2,000,000</td>
<td>3,000,000</td>
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<td>Gasoline</td>
<td>1,000,000</td>
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<td>Aviation &amp; Jet Fuel</td>
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<td>Diesel &amp; Fuel Oils</td>
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<td>Kerosene, Distillate &amp; Coke</td>
<td>100,000</td>
<td>150,000</td>
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<tr>
<td>Other Petroleum Products</td>
<td>50,000</td>
<td>75,000</td>
<td>100,000</td>
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</table>
Port Metro Vancouver Tanker Movements

Historical Monthly Record, April 2010: 143,000 Bbl/d
Established operations support a wide range of ship transport including crude tankers

Petroleum products currently represents a small portion of total port traffic

<table>
<thead>
<tr>
<th>Vessel Traffic</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010E</th>
<th>2016E</th>
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<tbody>
<tr>
<td>Number of Vessel Arrivals</td>
<td>2,698</td>
<td>2,693</td>
<td>2,594</td>
<td>3,004</td>
<td>2,791</td>
<td>2,832</td>
<td>3,500</td>
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<tr>
<td>Number of Crude Tanker Arrivals</td>
<td>22</td>
<td>27</td>
<td>38</td>
<td>40</td>
<td>65</td>
<td>71</td>
<td>288</td>
</tr>
<tr>
<td>% Tankers</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
<td>2%</td>
<td>3%</td>
<td>8%</td>
</tr>
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</table>
Oil & Gas projects that require additional shipping capacity
Unprecedented growth

Oil Transportation - $10 Billion of proposed expansions

- **Enbridge Northern Gateway** proposes to export 525,000 barrels of crude oil and import 193,000 barrels of condensate per day
  - An additional average of 18 tankers a month from a terminal in Kitimat (Douglas Channel transit) will be required to support the Project
- **Kinder Morgan** is proposing to expand its current system to allow for export of 750,000 - 850,000 barrels per day
  - An additional 25-30 tankers a month from a terminal in the Burrard Inlet will be required following the Trans Mountain expansion
### Aframax Tanker

**Description**

- Displacement: 80,000 DWT maximum
- Aframax Tanker (proposed smallest tanker to call at the Kishon Terminal)
- Note: Aframax = the largest tanker size in the average freight rate assessment.

<table>
<thead>
<tr>
<th>Aframax</th>
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<tbody>
<tr>
<td>Length (m)</td>
<td>236</td>
</tr>
<tr>
<td>Beam (m)</td>
<td>32</td>
</tr>
<tr>
<td>Depth (m)</td>
<td>19</td>
</tr>
<tr>
<td>Draft (m)</td>
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</tr>
</tbody>
</table>

### Suezmax Tanker

**Description**

- Displacement: 150,000 DWT (Currently) Suezmax Tanker (proposed average size tanker to call at the Kishon Terminal)
- Note: Suezmax = Largest ship capable of transiting the Suez Canal.

<table>
<thead>
<tr>
<th>Suezmax</th>
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<tbody>
<tr>
<td>Length (m)</td>
<td>278</td>
</tr>
<tr>
<td>Beam (m)</td>
<td>48</td>
</tr>
<tr>
<td>Depth (m)</td>
<td>23</td>
</tr>
<tr>
<td>Draft (m)</td>
<td>17</td>
</tr>
</tbody>
</table>

### VLCC Tanker

**Description**

- Displacement: 300,000 DWT (Currently) VLCC Tanker (proposed largest tanker to call at the Kishon terminal)
- Note: VLCC = Very Large Crude Carrier

<table>
<thead>
<tr>
<th>VLCC</th>
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</thead>
<tbody>
<tr>
<td>Length (m)</td>
<td>346</td>
</tr>
<tr>
<td>Beam (m)</td>
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</tr>
<tr>
<td>Depth (m)</td>
<td>31</td>
</tr>
<tr>
<td>Draft (m)</td>
<td>12</td>
</tr>
</tbody>
</table>
Trans Mountain Westridge Terminal Expansion

- Today: Aframax tanker capacity 650,000 Bbl/d
- Future: Suezmax tanker capacity 1,000,000 Bbl/d
- Expand to 450,000 Bbl/d (dock capacity)
  - 2 berths
- Widen canal by dredging
- Port Suezmax capable post dredging
Kitimat Tanker Traffic

- Kitimat ship traffic peaked in 1993 at 279 ship calls
- Kitimat tanker traffic peaked in 1995 at 95 calls
- Average of 220 tankers forecast to call at the Kitimat terminal annually
- Compared to current levels, reporting traffic will increase in the Kitimat area as follows:
  - Douglas Channel - 86%
  - Wright Sound - 13%
  - BC North Coast - 3%
LNG Shipping Initiatives

Unprecedented growth - $ 50 Billion

Liquid Natural Gas (LNG)

- Apache Kitimat LNG — Five million metric tonne capacity
- Shell — Will initially have two production units that will each produce six million tonnes a year
- BC LNG (Haisla First Nation) received NEB approval to export 36 million tonnes over 20 years
- Others:
  - IOL / Exxon
  - Progress Energy / Petronas
  - BG
Unprecedented growth - $ 50 Billion

- **Oil Transportation** - $ 10 Billion of proposed expansions
- **Liquid Natural Gas (LNG)** - $ 50 Billion of proposed expansions
- **Upstream Natural Gas Production** $ 200 - $ 250 Billion

\[= $ 260 - $ 310 \text{ Billion}\]

- **Largest infrastructure expansion in the history of British Columbia and arguably – the one of the largest in Canadian history**
Regulatory Framework
Regulatory Processes: B.C. Coastal Development

**International:**
- Inert gas systems
- Double hulls and segregated ballast
- Mandatory towing arrangements
- Redundant steering systems
- Electronic navigation equipment
- Closed cargo loading and discharge
- International Safety Code (ISM Code)
- Standards of certification and watch keeping (STCW 95)
- Prevention and preparedness
- International Maritime Organization (IMO)
- Flag State, Port State and Classification Societies

**Canadian:**
- Transport Canada Port State Control
- Canada Pilotage Act
- Canada Coast Guard – Marine Communications and Traffic Services (MTS) Prince Rupert
- Ballast Water Control and Management Regulations
- Vessel Pollution and Dangerous Chemical Regulations
LNG Facilities

- Any facility and interconnecting pipeline will require extensive approvals including:

  - **Provincial**
    - B.C. EAO - Facility BC Environmental Assessment Certificate
    - B.C. EAO - Pipeline BC Environmental Assessment Certificate
    - B.C. Hydro Approvals
  
  - **Federal**
    - NEB - Export Licence
    - Transport Canada - TERMPOL
Regulatory Processes: B.C. Coastal Development

Crude Oil Export Facilities

- Current proposals are federally driven – in part because of the interconnecting pipelines and would involve:
  - Federal
    - NEB - Certificate (facility)
    - NEB - Export Licence
    - Transport Canada TERMPOL
# Regulatory Processes: B.C. Coastal Development

<table>
<thead>
<tr>
<th>Approval Phase</th>
<th>Applicable Legislation</th>
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<tbody>
<tr>
<td>Environmental Assessment</td>
<td>Environmental Assessment Act (BCEAA)</td>
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<tr>
<td></td>
<td>Canadian Environmental Assessment Act (CEAA)</td>
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<tr>
<td></td>
<td>Canada Port Authority Environmental Assessment Regulations (CPAEAR)</td>
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<td></td>
<td>Oil and Gas Activities (OGAA)</td>
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<td></td>
<td>Fisheries Act</td>
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<tr>
<td></td>
<td>Navigable Waters Protection Act (CEPA)</td>
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<td>Canadian Transportation Act</td>
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<td>Land Act</td>
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<td>Agricultural Land Commission Act</td>
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<td>Forest Act</td>
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<td>Heritage Conservation Act</td>
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<td>Water Act</td>
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<tr>
<td>To be able to Construct</td>
<td>Oil and Gas Activities Act</td>
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<td>National Energy Board Act</td>
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<tr>
<td></td>
<td>Environmental Management Act</td>
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<tr>
<td></td>
<td>TERMPOL</td>
</tr>
<tr>
<td></td>
<td>Marine Transportation Security Regulations</td>
</tr>
</tbody>
</table>

**Note**
1. Provincial Legislation
2. Federal Legislation
3. Only applies if LNG facilities and/or marine terminal are located in the Port of Prince Rupert
4. Federal voluntary review process
The EAO manages the B.C. environmental assessment process and makes recommendations to ministers on Environmental Assessment Certificate. It addresses a project’s potential environmental, health, social, heritage and economic effects. It identifies significant ways to prevent, minimize or avoid adverse effects. It ensures appropriate terms and conditions in an Environmental Assessment Certificate.

Three distinct criteria for a project to be reviewed:
- Projects that meet or exceed threshold triggers
- Projects identified by the Minister of Environment
- Projects accepted for review at a proponent’s request
Success requires effort

- Allure of stipulated legislated time lines for review process
  - Review of Application for completeness – 30 days
  - Application Review Stage – 180 days
  - Ministerial Decisions – 45 days
- EAO may require fundamental changes to a Project that is approved
- Extensive conditions of EA Certificate if project is approved
**B.C. Environmental Assessment Process**

- **Pre-Application Stage** (no timeline)
- **Application Review Stage** (180 days)
- **Decision** (45 days)

**Steps:**
- Project Description
- Determination that Project is Reviewable
- Scope and Process for Review Determined
- Information Requirements for Application (draft Terms of Reference)
- Application Prepared and Submitted
- Application Evaluated for Completeness
- Application Review
- Assessment Report
- Project Decision by Ministers
- Certificate Issued -- Project Authorized to Proceed to Permitting Stage
- Approved
- Not Approved
- No Certificate Issued -- Project Cannot Proceed

**Public Comment Period:**
- (30 days)
- (180 days)

**Working Group Review:**
- **FIRST NATION CONSULTATION**
Regulatory Processes: B.C. Coastal Development

New Federal Assessment Process

- Bill C-38 proposes a number of changes to the federal Canadian Environmental Assessment Agency (CEAA) review process:
  - **First**, environmental assessments will be triggered based on the type and size of a project
  - **Second**, federal environmental assessments will be managed by a dedicated agency - the Canadian Environmental Assessment Agency (the National Energy Board and Canadian Nuclear Safety Commission will still complete environmental assessments for projects within their respective mandates). Currently, responsibility for federal environmental assessment rests with any one of the 40 different federal departments and agencies
  - **Third**, the federal legislation will include express timelines for completion of the environmental assessment and regulatory process: 365 days for standard assessments, 18 months for reviews by the National Energy Board and 24 months for assessments by a review panel
  - **Fourth**, public and aboriginal consultation will be incorporated expressly into the environmental assessment process. Currently, federal consultation with first nations is often conducted ad hoc and separately from the environmental assessment process
  - **Fifth**, and potentially the most significant change from the perspective of proponents, is the concept of "one project, one assessment"
The primary purpose of TERMPOL is to examine projects that include construction and operation of a new marine oil terminal or LNG facility and changes in regional shipping activity.

The far reaching TERMPOL Review Process (TRP) requires consideration be given to a range of subject matters such as, but not limited to:

- Effects of increased shipping
- Perceived environmental concerns
- Perceived risks to communities
- The Navigational safety of the ship route(s)
- The level of services required to facilitate safe navigation
- The suitability of the design ship and maneuvering characteristics
- The adequacy of the design marine terminal
- Pollution prevention programs; and
- Marine contingency planning
First Nation and Stakeholder Issues
Understanding B.C.

- **B.C. Perspective:**
  - Second largest natural gas producing province in Canada
  - Within B.C., gas development is generally supported vs. oil development which remains highly controversial
  - B.C. government promote use of hydro power over carbon emission

- **Marine Terminals:**
  - All levels of governments generally supportive of LNG (local, provincial and federal) – mixed bag on crude
  - In NW BC, history of support for regional LNG proposals for past 30 years
  - Little past opposition by ENGOs to LNG
  - Kitimat LNG and connecting PTP both have received BC EAO permits
  - Haisla First Nation (Kitimat) encouraging of LNG
High Level Challenges

- Highly complex First Nations environment (lack of treaty and outstanding/overlapping land claims)
- Sophisticated, dedicated and well-funded ENGO network that now has an interest in crude and LNG shipments
- Oil exports have become a lightning rod for community/ENGO/First Nations opposition
- Latent anti-Alberta sentiment
- Increasing public apprehensions/opposition to “shale gas fracking” and water quality
- Concerns that offshore interests are “buying up” the province and that B.C. is bearing the environmental impacts of energy development for China
- Cumulative impacts of developments in NE B.C.
- Climate change and emissions
- Pipeline routing and water course crossings
- Marine and terrestrial water protection, overall safety concerns of spills
- Offshore development moratorium and implications for terminals/tanker traffic moratorium
Complexity of pipeline and terminal development

- Prince Rupert
- Terrace
- Kitimat
- Burns Lake
- Fort St. James
- Mackenzie
- Dawson Creek
- Fort St. John
- Grande Prairie
- Prince George

Northern British Columbia
Community Pipeline Engagement
First Nation Engagement
Add in Pipeline Development

[Diagram showing a map of pipeline development with various locations and Indigenous communities marked.]
Engaging First Nations

Framing a Partnership

- Project proponents need to understand FN community perspectives
  - Infrastructure
  - Social Services
  - Health Care
- Often severe time constraints and limited internal staffing and financial resources
- Most proponents are “new” to British Columbia
  - Practically all are new to Coastal BC
- Proponent needs often have little relevance or importance to broader community issues or needs
First Nations and Stakeholder Issues

• We need to understand where and why opposition exists
  • Technical issues
  • Terrestrial and Marine Issues
  • Benefits vs. Risk
  • Philosophical

• Once we identify the issues, we need to broaden the dialogue
  • Proponent must make a compelling case
  • Opposition never held to the same level of scrutiny or veracity

• Finally, we need to contemplate how to offset real and perceived risk vs. real and potential benefits
  • Not about employment and contracts
  • It’s about longer term partnerships and opportunity
First Nation Consultation

Challenges

• During the construction, operation and decommissioning of marine projects, many First Nations have concerns regarding:
  • Effects on marine environment
  • Navigation hazards
  • Noise, water and air pollution
  • Cumulative environmental effects
  • Employment & Compensation
  • Effects on cultural and traditional way of life
  • Catastrophic consequences of a marine spill
Exxon Valdez Crude Oil Spill

- **Oil tanker spill in Alaska in 1989**
  - Spilled up to 750,000 barrels of crude oil into the Pacific Ocean
  - Oil eventually covered 2,100 km of coastline and 28,000 km² of ocean
  - Confirmed that the spill was a result of human error

- **Aftermath**
  - Short-term depleted salmon, herring, clam and seal populations
  - Due to its remote location and lack of available equipment and personnel, the clean-up was slow
  - However – remarkable progress since 1989
Addressing First Nation Concerns

- Large concentration of natural resources in British Columbia are located in more remote and often northern areas where many First Nation communities reside, therefore:
  - Adequate First Nation consultation is imperative because they are so closely connected to their environment
  - Broad agreements need to be in place
  - Relationship building is often a win-win scenario
    - Industry can help diversify the economy and provide employment opportunities for individuals in remote communities
  - Sustainable development can co-exist with communities
  - Not optimistic that the Treaty process will solve anything – we need to think outside the box regarding our relationships with FNs
Critical Nature of Consultation

Building Relationships

• How you approach and deal with our external audiences says a great deal about who you are as proponents
  • Compressed engagement programs lead to mistrust, anxiety and potential opposition
  • What type of relationship do you really want?
• Proper stakeholder engagement leads to better project decisions – and expedited regulatory/permitting processes
  • Stakeholder engagement reduces project risk
• Regulators view consultation in many cases as more important than any practically any other project initiative
  • Screw up here – and you will be a Project Manager “barista”
B.C. ENGO Influences

- ENGOs can play an important role in processes – primarily when aligned with FN interests
- However... not all ENGOs are created equally
  - For some – any form of collaboration is viewed as appeasement
- ENGOs are typically far more nimble, innovative and determined, and much more effective at “communications” than regulators, governments or industry
  - Often try to position themselves “on same technical level” as proponents – without the benefit of qualifications or experience
- Often position themselves as “alternative regulatory” bodies
- Some claim to solely possess moral high ground
  - Tactics increasingly confrontational
Planning for Success

• Resource appropriately

• Seek out regulatory guidance early in your project development process

• Take the time to understand the “environment”
  • Know your audiences before they know you

• Rushing for “schedules” often leads to protracted regulatory processes
  • The more time you spend preparing for your project description – the better you will start the regulatory process

• No cookie-cutter approaches to consultation – common sense should prevail
  • ‘When in doubt... get out... of the office!’
Common Pitfalls: Regulatory Applications

Avoid the land mines

• **Underestimating schedule and resourcing requirements**
  - Pre-application engagement is critical to preserving any legislative timelines
  - Provincial or federal processes requires dedicated resources

• **Lack of discipline in document management**
  - Tracking of comments and commitments are increasingly critical to mitigate risk

• **Complexities of First Nation engagement in B.C.**
  - Ask First Nations how they want to be engaged?
  - Determine if you are talking to the right “person” within a FN community – issues scoping
    • Who are the key influencers, really?
  - Ask First Nations what success looks like to them, and see if you as the proponent can find some common ground early (i.e. must stay away from this location, etc.)
  - If you can’t bring your “A” game and your “A” team – stay home
General Conclusions

- Pace of development in B.C. will continue to strain the resources of and the capacities of regulators, First Nations and impacted stakeholders
- Consultation programs will require greater substance and timeframes in the future
  - Early engagement should become the model – not the exception
  - Defining consultation and community expectations is critical
- First Nations engagement will continue to become more complicated – no easy solutions
  - Patience, empathy and understanding
  - Not always about you
  - Creativity will spawn success
- Confrontational tactics will escalate
  - Led and/or funded by ENGOs
Questions?