



# EnviroEmerg Consulting

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## WORK & REFERENCES

**Cowichan Nation:** technical evaluation of the Trans Mountain Pipeline Expansion Project application related to marine transportation (tanker casualty/oil spill response) submitted to the National Energy Board as evidence. (May 22, 2015) **Reference:** Holly Vear Holly Vear, Barrister & Solicitor, Woodward & Co, [holly@woodwardandcompany.com](mailto:holly@woodwardandcompany.com) (250).383.2356

**Gitga'at First Nation:** technical evaluation of LNG export proponent's shipping applications under environmental assessments:

- Kitimat LNG (Chevron) TERMPOL Reports (May, 2014)
- LNG Canada Accidents Malfunctions Reports (November, 2014)
- Pacific NW LNG Accident Malfunction Reports (January, 2015)

**Reference:** Erin Mutrie, [erinmutrie@gmail.com](mailto:erinmutrie@gmail.com) (778) 884-6225

**Haida Nation's:** sponsored workshops as technical advisor, presenter/participant:

- Places of Refuge Workshop (Vancouver) August 12 to 13, 2015
- Places of Refuge Workshop (Skidegate) March 30-31, 2015
- Post Simushir Incident Workshop (Skidegate) May 12-12, 2015

**Reference:** Russ Jones, Project Manager, Secretariat of the Haida Nation, (250) 559-8945,

**Coastal First Nations - Great Bear Initiative.** Coastal First Nations/Federal Government/Provincial Government Major Shipping Tripartite Dialogues: Technical Specialist for CFN-GBI and attendee to series of Workshops in Richmond, BC in 2015. **Reference:** Garry Wouters, Policy Consultant for CFN-GBI, (604) 696-9889, [gwouters@coastalfirstnations.ca](mailto:gwouters@coastalfirstnations.ca)

**Coastal First Nations - Great Bear Initiative/Partnership in Marine Planning (MaPP):** Coastal First Nations community outreach pertaining to major marine vessel risk and response preparedness in British Columbia and the issues and solutions to improvement. **Reference:** Steve Diggon, Planning Coordinator, (250) 247-8751, [sdiggon@coastalfirstnations.ca](mailto:sdiggon@coastalfirstnations.ca) Community outreach provided a form to address coastal protection measures such as:

- Safe Shipping under IMO and Canada Shipping Act and institutional arrangements;
- Nature of cargo losses including oil, LNG, chemicals, containers, etc.
- Chronic operational impacts of routine vessel (ballast water, acoustical noise, air quality);
- Coastal investment in emergency tug rescue of a disabled vessel and regional salvage operations and logistics to move people and equipment to a casualty site and affected areas;
- Building emergency response capacity for coastal communities through training and exercises;
- Places of refuge decision making and planning for a vessel casualty needing assistance;
- Response gap analysis to determine efficacy of emergency response and logistical support;
- Geographic response plans and processes;

- Financial risks and vulnerabilities;
- Public/First Nation's oversight in coastal protection related to vessel operations/accidents.

Presentations provided to:

- Kitasoo/Xai'Xais Nation, June 10th and 11th, 2014 - Klemtu
- Heiltsuk Nation, June 12th and 13th, 2014 - Bella Bella
- Haida Nation, June 17th and 18th, 2014 - Old Massett
- North Coast-Skeena First Nations Stewardship Society, June 19th, and 20th, 2014- Prince Rupert
- Nuxalk Nation, December 2nd, 2014 - Bella Coola

Other outreached on major vessel casualty risk, response, preparedness in BC by other clients include:

- **San Juan Marine Resources Committee 2015 Marine Managers' Workshop** (March 26 & 27, 2015 Friday Harbor, Washington) on major marine vessels in shared coastal waters of the Salish sea on shipping, vessel traffic routes and risk, casualty consequences, response challenges, US/Canada trans-boundary response scenarios. **Reference:** Laura Arnold, 360-378-5569, [larnold@rockisland.com](mailto:larnold@rockisland.com)
- **City of Vancouver's Emergency Planners and Service Providers** (May 22nd, 2014, Vancouver) on major Marine Vessel casualty risk and consequences and the response challenges and solutions.
- Kinder Morgan Canada Executive (September 11, 2013, Calgary) regarding institutional and technical challenges of environmental emergency management and response to oil spills from major marine vessels and pipelines in BC. Reference: Katie McPherson, Emergency Planner for City of Vancouver, (604) 829-4380, [katie.McPherson@vancouver.ca](mailto:katie.McPherson@vancouver.ca)
- **Safe Shipping Alliance of the Salish Sea** (March 22, 2013, Vancouver) workshop on trans-boundary concerns of an oil spill in the Salish Sea. The alliance is an Environmental NGO with US and Canada representation. **Reference:** Stephanie Buffum, Friends Of The San Juan, (360) 378-2319, [stephanie@sanjuans.org](mailto:stephanie@sanjuans.org)
- **Haida Gwaii Workshop** sponsored by Haida Nation (October 7, 2013, Skidegate) on major marine vessels in BC's northern coastal waters on vessel traffic, operational impacts, casualty consequences, and response challenges with a focus on liquefied natural gas carriers. **Reference:** Russ Jones, Project Manager, Secretariat of the Haida Nation, (250) 559-8945, [russ.jones@haidanation.com](mailto:russ.jones@haidanation.com)
- **Haida Oceans' Technical Team** (HOTT) and the Marine Planning Partnership (MaPP) workshop Haida Gwaii Marine Future Scenarios (July 17th to 18th, 2012, Richmond) on major marine vessel and their risks, projects, trends, issues and challenges. **Reference:** Russ Jones, Project Manager, Secretariat of the Haida Nation, (250) 559-8945,
- **Gitga'at First Nations** (2011, Hartley Bay) institutional and technical challenges of environmental emergency management and response to oil spills. Reference: Chris Picard, Science Director, Gitga'at First Nation. (250) 624-5703, [chris.r.picard@gmail.com](mailto:chris.r.picard@gmail.com)



**Envirotech Services: Shoreline Cleanup Assessment Techniques (SCAT)** for freshwater environments: "Technical Specialist" Level Training. September 16th to 18th, 2014, Saskatoon, Saskatchewan. **Reference:** Shawn McDonald (Project Manager) (306) 244.9500 [smcdonald@envirotec.ca](mailto:smcdonald@envirotec.ca)

**TransCanada Pipeline: Shoreline Cleanup Assessment Techniques (SCAT)** for freshwater environments: "Technical Specialist" Level Training. September 5th to 6th, 2014, Airdrie, Alberta. **Reference:** Gary Trask (Incident Response Specialist) (204) 957-6837 [gary\\_trask@transcanada.com](mailto:gary_trask@transcanada.com)

**BC Ministry of Environment/Canadian Coast Guard: Shoreline Cleanup Assessment Techniques (SCAT)** for marine environments: "Technical Specialist" Level Training. Oct 29th and 30th, 2013, Prince Rupert, B.C. Provided a 2-day SCAT course to First Nations and Port of Prince Rupert personnel who may participate in shoreline assessment during a major marine oil spill. **Reference:** Laurie Boyle (Provincial Emergency Planner) (250) 387-8319 [laurie.Boyle@gov.bc.ca](mailto:laurie.Boyle@gov.bc.ca)

**Haida First Nation, Haida Gwaii:** Presented a workshop (Oct 6th, 2013) on major marine vessel casualty prevention and response preparedness in BC, with a focus on LNG carriers to the Marine Planning Group and Haida executive, followed by a briefing to the Haida Nation House of Assembly (Oct 16th, 2013). **Reference:** Russ Jones, Project Manager, Marine Planning, (604) 808-5914 [russ.jones@haidanation.net](mailto:russ.jones@haidanation.net)

**BC Ministry of Environment (July 2013).** Revised and up-dated the BC Ministry of Environment's provincial-level response plans (2013)

- BC Marine Oil Spill Response Plan
- BC Inland Oil Spill Response Plan
- BC Hazardous Material Response Plan.

Prepared an Incident Management Hand-book for MoE's Incident Management Team

Developed series of 22 Position Task Books for Technical Specialists that to support the team.

**Reference:** D'Arcy Sego (Provincial Emergency Planner) (250) 387-6789 [Darcy.Sego@gov.bc.ca](mailto:Darcy.Sego@gov.bc.ca)

**Gitga'at First Nation and Coastal First Nation (Great Bear Initiative):** Prepared three reports (December 2012 and August 2013):

1. *Major Marine Vessel Casualty Prevention, Preparedness and Response along British Columbia's Northern Coastal Waters: Issues and Solutions Statement;*
2. *Coastal Emergency Response Vessels A Benefit to First Nations, Coastal Communities and the Shipping Industry of British Columbia* (Concept Paper), and
3. *Building Coastal Emergency Response Capacity: A Benefit to First Nations, Coastal Communities and the Shipping Industry of British Columbia*

**Reference:** Gary Wouters (604) 696-9889 [gwouters@coastalfirstnations.ca](mailto:gwouters@coastalfirstnations.ca)

**US Environmental Protection Agency (EPA)/Superfund Technical Assessment & Response Team (START):** Shoreline Cleanup Assessment Techniques (SCAT) for freshwater environments: "Technical Specialist" Level Training. June 19 to 21, Fairbanks, Alaska. Provided a 3-day SCAT course directed towards EPA/START agencies who may participate in shoreline assessment during

a major oil spill from the Alyeska Trans-Alaska Pipeline. **References:** Carl Overpeck USEPA/START coordinator. phone: 907-257-5000 Ext: 3303 | Cell: 907-244-6508. [COverpeck@ene.com](mailto:COverpeck@ene.com)

**Coastal and Oceans Resource Inc (CORI)/Moran Environmental Recovery(MER):** Shoreline Cleanup Assessment Techniques (SCAT) for marine environments: "Technical Specialist" Level Training. April 2, 2013, Victoria, B.C. Provided a 3-day SCAT course directed towards consultants who may participate in shoreline assessment during a major marine oil spill. **References:** John Harper (CORI) (250) 655-1290 [john@coastalandoceans.com](mailto:john@coastalandoceans.com) or Josh Butler (Preparedness Manager for MER) (904) 355-4164 [jbutler@mranenvironmental.com](mailto:jbutler@mranenvironmental.com).

**BC Ministry of Environment:** Shoreline Cleanup Assessment Techniques (SCAT) for marine environments: "Technical Specialist" Level Training. March 12, 2013, Campbell River, B.C. Provided a 3-day SCAT course to train government, consultants, and First Nations personnel who may participate in shoreline assessment during a major marine oil spill. **References:** D'Arcy Sego (Provincial Emergency Planner) (250) 387-6789 [Darcy.Sego@gov.bc.ca](mailto:Darcy.Sego@gov.bc.ca) or Wayne Wall (Manager, Strategic Group) (250) 287-2246 [wayne.wall@sfdmi.ca](mailto:wayne.wall@sfdmi.ca)

**BC Hazmat Management Ltd:** February 18th to 20th, 201d. Provided Shoreline Cleanup Assessment Techniques (SCAT) course for freshwater environments in Sidney, British Columbia. **References:** David Rodgers (250) 656-3382 [daverogers@bchazmat.com](mailto:daverogers@bchazmat.com)

**BC Hazmat Management Ltd:** September 17th to 19th, 2012. Provided Shoreline Cleanup Assessment Techniques (SCAT) course for marine environments in Sidney, British Columbia. **References:** David Rodgers (250) 656-3382 [daverogers@bchazmat.com](mailto:daverogers@bchazmat.com)

**Plains Mainstream Canada:** July 23rd, 2012 to August 11th, 2012. Provided shoreline cleanup assessment techniques (SCAT) field services for the Red Deer River Incident. **Reference:** Trever Miller, Response Coordinator for SWAT consulting. (403) 828-1014 [tmiller@swat-ab.ca](mailto:tmiller@swat-ab.ca)

**Western Canada Marine Response Corporation (WCMRC):** June 5th, 2012. Participated in a marine oil spill response exercise in Delta as a field observer specialist and support to Environmental Unit as part of WCMRC's 10,000 tonne certification by Transport Canada **Reference:** Randy Neufeldt (250) 746-9443 [randyn@WCMRC.com](mailto:randyn@WCMRC.com)

**Western Canada Marine Response Corporation (WCMRC):** April 25, 2012. Participated in a marine oil spill response exercise in Langford (near Victoria) as a field observer specialist and support to Environmental Unit as part of WCMRC's 1,000 tonne certification by Transport Canada **Reference:** Randy Neufeldt (250) 746-9443 [randyn@WCMRC.com](mailto:randyn@WCMRC.com)

**Western Canada Marine Response Corporation (WCMRC):** April 5 2012. ICS 200 (basic) and (300) training. **Reference:** Rob Robinson (604) 294-6001 [RobR@WCMRC.com](mailto:RobR@WCMRC.com)

**Western Canada Marine Response Corporation (WCMRC):** June 2011. Facilitated a marine oil spill response exercise in Campbell River and provided truth (control) as part of WCMRC's 1,000 tonne certification by Transport Canada. **Reference:** Kevin Gardner. (604) 294-6001. [KevinG@WCMRC.com](mailto:KevinG@WCMRC.com)



**Living Oceans Society:** February 2011. Prepared a comprehensive report titled: *A Technical Analysis of Marine Transportation Statements for the Enbridge Northern Gateway Project Tanker Casualty Risk Reduction and Spill Response Preparedness* that provides insights into and evaluations of the proposed tanker casualty risk reduction and spill preparedness measures identified in the proponent's environmental impact statements to the *National Energy Board's Joint Review Panel*.  
**Reference:** Karen Wristen , 604 698-5044 ; [kwristen@livingoceans.org](mailto:kwristen@livingoceans.org)

**BC Ministry of Environment:** Incident Management Team oil spill exercise on shoreline cleanup. November 3, 2010, Richmond, B.C. CANADA. Designed and provided a tabletop exercise that used the tools and processes of the Incident Command System to develop a structured shoreline cleanup program based on a Bunker C spill from a grounded container vessel. Download: [Shoreline cleanup Exercise Nov3 2010.pdf](#) and [Shoreline Exercise Scenario Presentation.pdf](#). **Reference:** D'Arcy Seago (Emergency Planner, BC Ministry of Environment) 250 - 387-6789, [Darcy.Sego@gov.bc.ca](mailto:Darcy.Sego@gov.bc.ca)

**ConocoPhillips/Polar Tanker Inc.** Marine Oil Spill Exercise: August 12th & 13th, 2010, Seattle, State of Washington, U.S.A. Participated in the Environmental Unit tasked with determining Places of Refuge for an oil tanker casualty according to the State's Northwest Geographic Response Plan.  
**Reference:** Mark Franks, (Director Environment, ConocoPhillips Marine) 281 - 433-9595, [mark.m.franks@conocophillips.com](mailto:mark.m.franks@conocophillips.com)

**BC Ministry of Environment:** Shoreline Cleanup Assessment Techniques for Freshwater Environments: "Technical Specialist" Level Training. March 16, 2010, Kamloops, B.C. CANADA. Provided a 3-day SCAT course to train government, industry, and First Nations personnel who may participate in shoreline assessment during a major inland freshwater oil spill. **References:** Laurie Boyle (Emergency Planner) (250) 387-8319, [Laurie.Boyle@gov.bc.ca](mailto:Laurie.Boyle@gov.bc.ca), Kim Reinbolt (Health, Safety & Environmental Coordinator), Pembina Pipeline Corp. [kreinbol@pembina.com](mailto:kreinbol@pembina.com), Jason Turner, (Health, Safety & Environmental Coordinator), Kinder Morgan Canada, 250 - 371-4017, [Jason\\_Turner@KinderMorgan.com](mailto:Jason_Turner@KinderMorgan.com)

**BC Ministry of Environment:** Emergency Management Refresher Course. January 26, 2010, Victoria, B.C. CANADA. Delivered a one day refresher course that addressed the fundamentals of emergency management under the Incident Command System (ICS) and explored the more common and complex aspects of ICS that often need revisiting. Course sponsored and delivered to the B.C Ministry of Environment's Emergency Response Officers and Incident Management Team members. **Reference:** D'Arcy Seago, (Emergency Planner), 250 - 387-6789, [Darcy.Sego@gov.bc.ca](mailto:Darcy.Sego@gov.bc.ca)

**Taiwan Environmental Protection Agency:** International Maritime Organization (IMO) Oil Preparedness Response Course (OPRC) Level 3 training: October 8th, 2009, Burnaby, B.C. CANADA. Provided module on oil spill monitoring and assisted in table-top exercise for an IMO OPRC level 3 course offered to participants from Taiwan Environmental Protection Agency. Course sponsored by [Canadian Spill Response Organization](#) (CSRO) with *EmergWest.com Consulting* (Mark West - [www.emergwest.com](http://www.emergwest.com)) as contractor. **Reference:** Mark West at 604 - 785-5256 [mark@emergwest.com](mailto:mark@emergwest.com) or Lauri Solberg at [Counterspil Research](#) at 604 - 990-6944 [mail@counterspil.com](mailto:mail@counterspil.com)

**Western Canada Response Corporation (Burrard Clean Operations):** Incident Management Exercise for cross border spill (CANUSDIX): September 30 to October 2, 2009. Participated in an international exercise in Prince Rupert, B.C. CANADA, designed to address the spill response contingency portion of a Canadian Coast Guard lead project to lighter the Brigadier General Zalinski of its Bunker oil - a 1919 USAT vessel that sank in Grenville Channel in 1948. CANUSDIX is USCG/CCG component of international cross-boarder spill planning. Role was Resource Unit leader and assisted in preparing the Incident Action Plan. **Reference:** Bill Jahelka (Manager, Burrard Clean Operations) at BCO Duncan Regional Office at: (250) 746-9442 [billj@burrardclean.com](mailto:billj@burrardclean.com)

**Chevron Canada Ltd/Burrard Clean Operations:** Incident Management Exercise: August 19/20 2009. Participated in workshop and oil spill exercise (Resource Unit and Coach) undertaken in Vancouver, British Columbia, CANADA. **Reference:** Michael Ward (Chevron Emergency Response Safety & Security) at Burnaby Refinery 604 257-4011 [mward@chevron.com](mailto:mward@chevron.com) or Bill Jahelka (Manager, Burrard Clean Operations) at BCO Duncan Regional Office at: (250) 746-9442 [billj@burrardclean.com](mailto:billj@burrardclean.com)

**Island Tug and Barge Ltd:** Incident Management Orientation Course. August 18, 2009. Provided course on Incident Command System orientation that included presentation on a disciplined approach to emergency management to address company direction in emergency management, and ICS 100 Orientation Course. Course sponsored by Burrard Clean Operations. **Reference:** Niels Gram (ITB Operations Manager) or Steve Pollock (ITB Marketing Manager) at (604) 873-4312 or [info@islandtug.com](mailto:info@islandtug.com)

**Alberta Environment's Support & Emergency Response Team (ASERT):** Incident Management Orientation Course .October 2008. Participated in ASERT annual workshop in Banff, Alberta and provided talk and discussions pertaining to a disciplined approach to emergency management with special reference to the Incident Command System. **Reference:** Rhonda Brett (Response Officer) at Alberta ASERT at: 780 644-1389 [rhonda.brett@gov.ab.ca](mailto:rhonda.brett@gov.ab.ca) or Greg Carter (Manager) ASERT at: 780 415-0989 [greg.carter@gov.ab.ca](mailto:greg.carter@gov.ab.ca)

**Western Canada Response Corporation (Burrard Clean Operations) -** September 30, 2008. Facilitated an oil spill response table-top exercise jointly conducted with Shell Canada Ltd. A spill scenario with multi-agency participation and conducted under the Incident Command System. **Reference:** Kevin Gardner (President WCRC) at: (604) 294-6001 [keving@burrardclean.com](mailto:keving@burrardclean.com)

**Living Oceans Society:** July 2008. Prepared a comprehensive report titled: *Major Marine Vessel Casualty Risk and Response Preparedness in British Columbia*. The purpose of the analysis is to assist in determining policy direction for the Living Oceans Society so that they may foster improved marine coastal protection. The reports explains vessel casualty risk and consequences, as well as effective emergency response to mitigate environmental damages such as ecological impacts stemming from cargo loss, oil spill, and/or the ship wreck itself. The report focuses on institutional, financial, and technical strengths and weakness in both vessel casualty and oil spill response in

British Columbia as well as nationally. The report is available on EnviroEmerg web-site. **Reference:** Kate Terhune 250 - 973-6580; [kterhune@livingoceans.org](mailto:kterhune@livingoceans.org)

**BC Ministry of Environment:** Shoreline Cleanup Assessment Techniques (SCAT) for marine (Temperate) environments "Technical Specialist" Level Training. March and February, 2008. Provided SCAT courses sponsored by the BC Ministry of Environment, Victoria, Canada. The 3-day SCAT course provides training to government, industry, and First Nations personnel who may participate in shoreline assessment during a major marine oil on Canada's west coast. **Reference:** Laurie Boyle (Emergency Planner) (250) 387-8319, [Laurie.Boyle@gov.bc.ca](mailto:Laurie.Boyle@gov.bc.ca) or Craig Dougans ([Stratagem Consulting](http://Stratagem Consulting)) at: (604) 313-7871 [craig@stratagemconsulting.ca](mailto:craig@stratagemconsulting.ca)

**Seaspan Coastal Intermodal:** Incident Command System (ICS) 200/300 level training. January, 2008 in Delta, British Columbia (Canada). Course was a joint endeavour with *EmergWest.com Consulting* (Mark West - [www.emergwest.com](http://www.emergwest.com)) Training also included a vessel accident / haz-mat exercise. **Reference:** Marion Legare (Health, Safety & Environment Officer) (604) 940-7249 [mlegare@coastalintermodal.com](mailto:mlegare@coastalintermodal.com)

**BC Ministry of Environment's** Incident Management Team Workshop - November, 2007. Provided an examination of the technical and institutional challenges facing the Response Teams to deliver provincial-level response to major marine and inland oil spills and hazardous material incidents. A keynote speaker, expertise resource, and exercise planner/facilitator. Held in Kamloops, British Columbia. **Reference Contact:** Laurie Boyle, BC Ministry of Environment, Victoria, (250) 387-8319 [Laurie.Boyle@gov.bc.ca](mailto:Laurie.Boyle@gov.bc.ca)

**Company of Masters Mariners of Canada Seminar:** keynote speaker and exercise facilitator for a table-top exercise titled "the Masters Dilemma" Held in Hamilton, Ontario October, 2007. Workshop was an examination of emergency response to a major vessel casualty in the Great Lakes area using the Incident Command System. **Reference:** Capt. Ratch Wallace: BC Ferries, (250) 978-1220 [ritchwal@telus.net](mailto:ritchwal@telus.net) or Cap. Kevin Kelly Upper Lakes Group, (416) 738-8218 [kelly@upperlakes.com](mailto:kelly@upperlakes.com)