IN THE MATTER OF
NATIONAL ENERGY BOARD

Hearing Order OH-001-2014
Trans Mountain Pipeline ULC
Application for the Trans Mountain Expansion Project

AFFIDAVIT OF JEREMY FONTENAULT

I, **Jeremy Fontenault**, of South Kingston, in the State of Rhode Island

AFFIRM AND SAY AS FOLLOWS:

1. The written evidence set out in the table under paragraph 3 below was prepared by me, or under my direction and control, on behalf of Trans Mountain Pipeline ULC, who is the applicant in National Energy Board hearing OH-001-2014 (the "Hearing") for the Trans Mountain Expansion Project. It is accurate to the best of my knowledge and belief.

2. My curriculum vitae is attached as **Exhibit A**.

3. I hereby adopt the following evidence for the purposes of the Hearing:

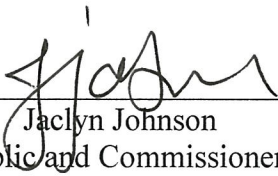| Exhibit No.	Evidence	Date filed
B18-13	Simulations of Hypothetical Oil Spills from the Trans Mountain Expansion Project Pipeline – P1 V6 Route	12/17/2013
B248-40	Simulations of Hypothetical Oil Spills from the Trans Mountain Expansion Project Pipeline (Line 2)	06/12/2015
B290-30	Simulations of Hypothetical Oil Spills from the Hargreaves to Blue River Segment of the Trans Mountain Pipeline (Line 2, Rev. VH)	06/12/2015
B291-14	Simulations of Hypothetical Oil Spills from the Froth to Finn Creek Segment of the Trans Mountain Pipeline (Line 2, Rev. VH)	06/12/2015
N/A	1.15 Reply to Spill Risk Assessment (EmergWest)	08/20/2015

and all information requests pertaining to the above documents.

AFFIRMED via video teleconference
at Calgary, AB this 19th day of August, 2015.

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Jeremy Fontenault

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Jaclyn Johnson
A Notary Public and Commissioner for Oaths
in and for the Province of Alberta

JACLYN S. JOHNSON
Barrister & Solicitor
A Commissioner for Oaths
in and for Alberta

This is EXHIBIT "**A**" referred to in the
Affidavit of **Jeremy Fontenault**, affirmed
via video teleconference this 19th day of
August, 2015

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Jaclyn Johnson
A Notary Public and Commissioner for Oaths
in and for the Province of Alberta

JACLYN S. JOHNSON
Barrister & Solicitor
A Commissioner for Oaths
in and for Alberta

Jeremy Fontenault – Oil Spill Trajectory Modeler

B.S.   Natural Resources, Forest Management – University of New Hampshire

Areas of Expertise:

Jeremy Fontenault is a GIS/Data Management Specialist at RPS ASA. He specializes in modeling the fate and transport of hazardous liquids over land.   He has 4 years of experience in land-based spill modeling from hundreds of pipelines and facilities through the United States and Canada. This experience includes compiling and preparing the input data for the models, performing the spill model simulations, and developing and improving the models.   Mr. Fontenault received a Bachelor of Science degree from the University of New Hampshire in 2002. His degree was in Forest Management, with a focus on Geographic Information Systems (GIS). Mr. Fontenault has experience conducting advanced analyses and processing numerous types data and model results with GIS. He has extensive experience building and managing large datasets and databases. He is familiar with reporting and summarizing results of analysis both from GIS and other databases. Mr. Fontenault also has skills in programming that he has used to streamline analysis, processing of data, reporting of results, and development of models.

Experience Includes:

RPS ASA – September 2011 - Present
Senior GIS/Data Management Specialist
- Lead modeler for land-based spill modeling projects
- Modeled the trajectory and fate of hazardous liquid spills on land.
- Modeled the transport and effects of the resulting vapor cloud from releases of Highly Volatile Liquids
- Developed and tested modeling software used to simulate releases of hazardous liquids
- Acquired, reviewed, and processed data for input into modeling software
- Processed, analyzed and summarized model output data
- GIS/data management support.
- Development of software/tools in various programming languages: C# .NET, VB .NET, Python.

New York City – Department of Environmental Protection – March 2009 - September 2011
Program Analyst/Data Manager
- Develop and implement strategies for data acquisition and management, and maintain existing databases
- Evaluate existing procedures and develop new processes to streamline or automate with existing systems.
- Provide data analysis and reporting using Crystal Reports, SQL queries and other tools.
- Create and manage GIS data and produce maps for internal and external use.
- Manage GPS data collection for program including data standards, project planning, data correction, and processing.

Tele Atlas – March 2003 - March 2009
Analyst, Coordinator, Trainer, and Technician
- Used GIS analysis techniques, Python (and other) programming, SQL, and statistical analysis to make qualitative and quantitative statements about GIS products

- Developed, tested, and implemented new tools, procedures, and techniques for testing GIS products
- Tracked, developed, and implemented projects
- Assisted in developing and maintaining operational plans and aligning them to the company's global plan
- Evaluated/Analyzed commercial and government GIS data for potential use to enhance database
- Delivered training and created and maintained training curricula and materials
- Edited digital road map data in proprietary GIS environment

Key Projects:

- **Enbridge Northern Gateway Pipeline**
  - Modeled the trajectory and fate of hypothetical oil spills from the proposed Northern Gateway Pipeline from Bruderheim, Alberta to Kitimat, British Columbia.
  - Modeled the fate and effects of oil spills along the proposed Northern Gateway Pipeline to support evaluation of the ecological and human health risks.
- **Kinder Morgan Trans Mountain Expansion Project (TMEP)**
  - Modeled the trajectory and fate of hypothetical oil spills from the proposed TMEP from Edmonton to Vancouver, Canada.
- **Enbridge Line 3 Replacement Project**
  - Modeled the trajectory and fate of hypothetical oil spills from the proposed Enbridge Line 3 Replacement Pipeline route in support of the ecological and human health risk assessment.
- **Enbridge Sandpiper Pipeline**
  - Modeled the trajectory and fate of hypothetical oil spills from the proposed 616 mile Sandpiper Pipeline from North Dakota to Wisconsin.
- **Dakota Access Pipeline Project (DAPL)**
  - Modeled the trajectory and fate of hypothetical oil spills from the proposed 1,134 mile DAPL from North Dakota to Illinois.
- **Energy Transfer Crude Oil Pipeline Project (ETCOP)**
  - Modeled the trajectory and fate of hypothetical oil spills from the proposed 744 mile ETCOP from Illinois to Texas.
- **Enbridge Liquids Mainline System**
  - Modeled hypothetical rupture scenarios from the entire 11,800 mile Enbridge Liquids Mainline System in the United States and Canada.
- **Access Pipeline**
  - Modeled the trajectory and fate of hypothetical oil spills from the 640 kilometer Access Pipeline in Alberta, Canada.
- **Sunoco Logistics Pipeline System**
  - Modeled the trajectory and fate of hypothetical oil spills from the pipelines comprising the Sunoco Logistics Crude Oil, Refined Products, and Natural Gas Liquids pipeline systems.
- **Other**
  - Modeled the trajectory and fate of hypothetical oil spills from hundreds of pipelines and facilities in the United States and Canada in support of High Consequence Area (HCA) analysis, permitting, environmental impact assessments, etc.