Natural Resources Board
District #7 Environmental Commission
1229 Portland Street, Suite 201
St. Johnsbury, Vermont 05819

April 15, 2013

Jurisdictional Opinion #7-274

RE: 10 V.S.A. § 6007(c) Act 250 disclosure statement; jurisdictional determination Modification of the Portland Pipe Line (where located in Vermont, Northeast Kingdom Region)

Request for Jurisdictional Opinion Received on January 29, 2013

Attn: All Parties Identified on the Attached Certificate of Service dated April 15, 2013.

A request for a jurisdictional determination was filed on January 29, 2013 by a number of entities and individuals, all represented by the Environmental and Natural Resources Law Clinic of the Vermont Law School, via Douglas A. Ruley, Esq. The specific requestors are as follows: (i) National Wildlife Federation; (ii) Vermont Natural Resources Council; (iii) Sierra Club-Vermont Chapter; (iv) Vermont Public Interest Research Group; (v) 350Vermont; (vi) Conservation Law Foundation; (vii) Natural Resources Defense Council; (viii) Brent and Rona Kinsley; (ix) Ron Holland and Laurie Green; (x) Reed Olsen; and (xi) Adam Favalaro; collectively, Requestors.

This jurisdictional opinion identifies whether or not an Act 250 permit is required in the event that the Portland Montreal Line's (PMPL) flow is reversed for conveyance of tar sands oil (also known as diluted bitumen, or "dilbit") ("Project").

STATEMENT OF FACTS

- 1. An existing underground 12-inch pipeline was constructed in approximately 1941 from Portland Maine to Montreal Canada, as part of a wartime effort to transport crude oil to Canada. The existing pipeline includes a section through the Northeast Kingdom (NEK) region of Vermont, Act 250 District 7 (in the towns of Jay, Troy, Newport, Irasburg, Barton, Sutton, Burke, Victory, Guildhall, Granby, and Lunenburg).
- 2. An 18-inch diameter underground pipeline through the same corridor / alignment was constructed in approximately 1951.
- 3. A 24-inch diameter underground pipeline through the same corridor / alignment was constructed in approximately 1965.
- 4. The pipeline system transports crude oil in a south to north direction as originally planned (i.e. from Portland Maine to Montreal Canada). The 18-inch diameter pipeline has also been used to transport natural gas, and is currently purged of oil and gas. The 12-inch diameter pipeline is currently "retired" but serves as an integral part of the pipeline system by providing cathodic corrosion protection.



- 5. Monitoring and maintenance have been ongoing since 1965 including valve maintenance and routine integrity monitoring.
- 6. The portions of the pipelines located through Vermont are owned and operated by the Portland Pipe Line Corporation (PPLC).
- 7. In 2008, PPLC considered a flow reversal project and obtained an Act 250 jurisdictional opinion (JO#7-265), which was based in part on a specific work scope as outlined by PPLC in 2008. JO #7-265 concluded that Act 250 jurisdiction did not apply to the project identified in 2008. However, JO #7-265 did not consider the difference between tar sands oil and the other types of crude oil, and the characteristics of tar sands oil when released into the environment. The 2008 flow reversal project, part of a bigger project known as the Trailbreaker Project, was later abandoned due to the inability to secure commercial interest during a period of deteriorating market conditions.
- 8. Currently, PPLC has no specific plans or agreements to implement a flow reversal Project. However, PPLC remains open to, and is actively seeking any opportunities to convey tar sands oil through its petroleum pipeline located between South Portland, Maine and Montreal East, Quebec. Press recordings and articles quote PPLC CEO Larry Wilson as "aggressively looking at every opportunity to use these excellent assets in a way that will continue to provide for the North American energy infrastructure needs." Vermont Public Radio, http://www.vpr.net/news_detail/97527/oil-exec-says-line-could-be-used-for-tar-sands/ (Feb. 18, 2013). If a flow reversal project is again pursued, the work involved for this Project will likely be similar to the scope of work outlined in 2008, as identified in the letter dated March 15, 2013 from Peter Van Oot, Esq. to Kirsten Sultan.
- 9. If implemented, the Project will generally consist of completing modifications and maintenance needed to support use of a portion of the pipeline system for transport of tar sands oil in a reversed, north to south direction (i.e. from Montreal East, Quebec to South Portland, Maine), via the existing 18-inch diameter pipeline. The modifications and maintenance are outlined in a letter dated March 15, 2013 from Peter D. Van Oot, Esq., for PPLC, and includes replacement of approximately sixteen check valves with gate valves, including new gate valve "silo" enclosures, at river crossing locations; reconfiguration of valves and piping at pump stations; and replacement of approximately seven previously installed pipe repair "sleeves" with new welded sections of pipe.
- 10. The Project involves the transportation of tar sands oil originating in the Alberta Canada tar sands region, where oil production is increasing rapidly. The type of oil originating in the Alberta Canada tar sands region has unique characteristics that are distinguishable from other types of crude oil previously transported through the PMPL. The oil originating in Alberta has the consistency of peanut butter and must be diluted for conveyance through a pipeline. The oil originating from the Alberta tar sands is diluted for transport via impregnation with bitumen and dilution with other hydrocarbons, and the resulting diluted bitumen is referred to as "dilbit" (tar sands oil).

- 11. Requestors assert that tar sands oil is substantially different than other types of crude oil, is impregnated with bitumen and diluted with other hydrocarbons, and must be transported at significantly greater pressure than conventional crude oil, due to its weight and density, which generates greater heat in the pipelines, leading to higher rates of pipeline corrosion and potential failure, and greater impact when failure occurs. Requestors also assert that tar sands oil has greater viscosity and toxicity, and that it is more difficult to clean when it leaks into the environment, in comparison to conventional crude, because it sinks (thus cannot be skimmed from the surface of a water body), because it becomes sticky when exposed to sunlight, and because the toxic substances bio-accumulate in humans and wildlife with harmful impacts continuing with time.
- 12. The National Transportation Safety Board (NTSB) is an independent Federal agency dedicated to promoting aviation, railroad, highway, marine, pipeline, and hazardous materials safety. Established in 1967, the agency is mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews. The NTSB published a report of the July 2010 Kalamazoo spill, including recommendations to the U.S. Secretary of Transportation, the Pipeline and Hazardous Materials Safety Administration (PHMSA), Enbridge, the American Petroleum Institute, the Pipeline Research Council International, the International Association of Fire Chiefs, and the National Emergency Number Association. The NTSB provided the following information in its report:

Effective oil spill removal strategies largely depend on the crude oil mixture's density and its tendency to float or sink in fresh water. Once the crude oil mixture (oil and diluents) enters the environment, weather factors, volatility, and physical agitation affect the composition, thus allowing some of the oil to sink into river sediments and collect on the river bottom. [...] The most effective response methods to control the environmental consequences of an oil spill vary according to the specific spill conditions (that is, the type and amount of oil, weather and site conditions, and the effectiveness of the response strategies). The time required to bring needed resources and personnel to the scene is also critical to an effective response. Response actions are most viable and effective very early during a response.

source:

http://www.ntsb.gov/doclib/reports/2012/PAR1201.pdf (emphasis added).

13. A separate oil transmission pipeline project, not located in or near Vermont, is related to transport of tar sands oil, and involves construction of a new 36-inch diameter pipeline, approximately 1,200 miles long, from Alberta to Nebraska. This other pipeline project, the Keystone XL Pipeline, is partially under construction. PPLC asserts that tar sands oil is comparable to other conventional types of crude oil, in terms of its risk of spill. To

support this position, PPLC cites the March 2013 US State Department Draft Supplemental Environmental Impact Statement for the Keystone XL Project (Draft Supplemental EIS) which concludes, in pertinent part, that: "A comparison of the crude oil that would be transported by the proposed pipeline with other conventional crude oils indicates that the characteristics of the proposed Project's crude oil are generally comparable to those of conventional crude oils (Been and Wolodko 2011). [...]. Comparison of incident data from Alberta pipeline systems with data from U.S. pipeline systems (Section 4.13.2.4, Pipeline Incident Information Sources) indicates that Alberta pipelines that have likely shipped diluted bitumen (dilbit), synthetic crude oil (SCO), or Bakken shale oil are not more prone to failure than other pipeline systems carrying conventional crude oils."

- 14. An <u>aged</u> pipeline has greater risk of failure (and release to the environment) in comparison to a <u>new</u> pipeline, due to general degradation, or risk of degradation over time, when all other factors are equal.
- 15. In July 2010 more than one million gallons of tar sands oil from an Enbridge pipeline spilled near the Kalamazoo River in Michigan. The tar sands oil sank to the river bottom, coating wildlife, rocks, and sediment. Cleanup from this spill is incomplete, with costs at \$800 million and rising. This July 2010 spill illustrates the risk associated with transport of tar sands oil, and the challenges faced when a spill occurs, which differ from the challenges following a spill of other types of crude oil which float on water bodies and therefore can be contained with booms and removed by vacuuming from the surface of the water as part of a spill response cleanup. Because tar sands oil cannot be vacuumed from the surface of a body of water, and instead sinks in fresh water bodies, as occurred in Kalamazoo, it may prove significantly more difficult to clean up following spill events, and to remove from locations where it enters surface or ground water.
- 16. The Project traverses three large tracts of land owned by the State of Vermont: the Victory State Forest, the Victory Basin Wildlife Management Area (Victory WMA), and the Willoughby State Forest. Considerable funds have been invested since these parcels were acquired. The Agency of Natural Resources makes annual payments to all of the towns within which the three tracts are located. The payments currently total \$107,298 annually. The three tracts feature important natural communities, some of which are rare and irreplaceable, in addition to necessary wildlife habitat.
- 17. The Project traverses approximately 60+ miles of land, and crosses the Connecticut River, the Missisquoi River, tributaries to Crystal Lake, and multiple other streams, lakes, and wetlands, including those located within the three large tracts of land owned by the State of Vermont.
- 18. The existing pipeline was constructed prior to June 1, 1970. The 60+ mile Project was constructed on more than one acre of land, and involving more than ten acres of land (60 miles x 5,280 feet per mile x 10 feet wide corridor (conservative estimate) = 3,168,000 square feet / 43,560 square feet per acre = 72 acres).

19. The town of Jay, Burke, and Sutton have adopted permanent zoning and subdivision bylaws. The towns of Troy, Newport, Irasburg, Barton, Victory, Guildhall, Granby, and Lunenburg have not adopted permanent zoning and subdivision bylaws.

APPLICABLE LAWS

- 20. Under 10 VSA § 6001(3)(A)(i), development subject to Act 250 jurisdiction includes the construction of improvements on a tract or tracts of land, owned or controlled by a person, involving more than 10 acres of land within a radius of five miles of any point on any involved land, for commercial or industrial purposes in a municipality that has adopted permanent zoning and subdivision bylaws.
- 21. Under 10 VSA § 6001(3)(A)(ii), development subject to Act 250 jurisdiction includes the construction of improvements for commercial or industrial purposes on more than one acre of land within a municipality that has not adopted permanent zoning and subdivision bylaws.
- 22. Under Act 250 Rule 2(C)(8), "Pre-existing development" means any development in existence on June 1, 1970 and any development which was commenced before June 1, 1970 and completed by March 1, 1971.
- 23. Under Rule 2(C)(7) "Substantial change "means any change in a pre-existing development or subdivision which may result in a significant adverse impact with respect to any of the criteria specified in 10 V.S.A. Section 6086(a)(1) through (a)(10)."
- 24. Under Rule 34(B), Substantial change to a pre-existing development or subdivision, if a change to a pre-existing development or subdivision involves a substantial change thus implicating Act 250 jurisdiction, it shall be subject to a new application process including the notice and hearing provisions of 10 V.S.A. §§6083, 6083a, 6084 and 6085 and the related provisions of these rules.

ISSUE

The central issue is whether the flow reversal Project to convey tar sands oil requires an Act 250 permit as a development pursuant to (a) 10 VSA § 6001(3)(A)(i)-(ii) or (b) as a "substantial change" to a pre-existing development pursuant to Act 250 Rules 2C(7), 2C(8) and 34(B).

JURISDICTIONAL ANALYSIS

Although there are no concrete plans for the Project at this point, the Project is not hypothetical. According to its CEO, PPLC is actively – "aggressively" – seeking the opportunity to convey tar sands oil through Vermont. Jurisdictional opinions are routinely issued for projects that are still conceptual. See *Pfizer v. Shalala*, 182 F.3d 975, 980 (D.C. Cir. 1999) ("An administrative agency, which is not subject to Article III of the Constitution of the United States and related prudential limitations, may issue a declaratory order in mere anticipation of a controversy or

simply to resolve an uncertainty."). Indeed, the Project appears to be at a similar stage now as when PPLC sought the 2008 jurisdictional opinion.

The existing pipeline is a pre-existing development, because it was constructed prior to June 1, 1970 and would require an Act 250 permit if constructed today. If constructed today, the pipeline would be a "development" pursuant to 10 VSA § 6001(3)(A)(i)-(ii), because it constitutes the construction of improvements for commercial purposes on land involving the requisite acreage (see calculation in finding number 18). However, projects that were built before the adoption of Act 250 are "grandfathered," and need no Act 250 review or permit to continue operations as they existed before June 1, 1970. However, if those projects undergo a "substantial change," they then require a Land Use Permit. 10 V.S.A. §6081(b).

Act 250 Rule 2(C)(7) defines a "substantial change" as "any change in a pre-existing-development or subdivision which may result in a significant adverse impact with respect to any of the criteria specified in 10 V.S.A. Section6086(a)(1) through (10)." There is a two-part test for determining whether a substantial change has occurred. The first question is whether the project causes any cognizable change in the development, and the second is whether the change has the potential for significant adverse impact under any Act 250 criterion. See, In re Vermont RSA Limited Partnership, 2007 VT 23 ¶ 10 (mem.)(applying former Environmental Board Rule 2(G) and citing Sec'y, Vt. Agency of Natural Res. v. Earth Constr., Inc., 165 Vt. 160, 165 (1996); In re Barlow, 160 Vt. 513, 521-22 (1993)); see also, In re H.A. Manosh Corp., 147 Vt. 367, 369-70 (1986). Once a project is determined to fall within the exemption for preexisting development (10 V.S.A. §6081(b)), the burden shifts to the proponents of jurisdiction to demonstrate that the project represents a substantial change to the preexisting development. In re Vermont RSA Ltd. Partnership d/b/a Verizon Wireless, 2007 VT 23, ¶10 (2007)(mem.). Both the Requestors and PPLC have submitted information for review.

Cognizable Change

The first question in determining whether the Project constitutes a substantial change is whether it constitutes a cognizable change to the preexisting development. As PPLC points out, many decisions on this question have involved cognizable physical changes. But the Act 250 Rule defines substantial change as *any* change with a potential for significant adverse impact. Act 250 Rule 2(C)(7). The plain language of the rule is clear. In the context of a "substantial change" analysis, "any change" includes both physical changes to the project *and* changes in its use. In *In re Greg Gallagher*, 150 Vt. 50, 51 (1988), the Court required the Environmental Board to hold hearings to determine if the conversion of cabins to condominium units was a "substantial change" because of the change in use of the cabins even when no physical change to the buildings was proposed. Rather, the claimed cognizable physical changes were impacts to waste water systems, water supplies, and pollution of streams and shorelines that could result from year-round use of the unchanged cabins. *Id*.

In this case, the Project involves both a change in use and physical changes. As set forth more specifically in the Statement of Facts, the flow reversal Project includes cognizable changes to support the use of the pipeline for transport of tar sands oil originating from Alberta Canada, and

thus flowing north to south. The specific physical changes are the changes at the check valves, pump stations, and the different materials in the pipeline, namely tar sands oil, also known as dilbit, which contains diluents. These are cognizable changes under the Act 250 Rule 2C(7) substantial change test.

Potential For Significant Impact

The second part of the substantial change test considers whether the change has the potential for significant adverse impact under one or more of the ten Act 250 criteria. To constitute a substantial change, a change to a preexisting development need only cause a potential for significant impact under one Act 250 criterion. In this case, the Project has the potential to cause significant impacts under several of the criteria specified in 10 V.S.A. Section 6086 (a)(1) through (a)(10). It is important to note that the mere fact that the pipeline is aging does not, by itself, represent a substantial change. Rather, emerging information suggests that tar sands oil is relatively difficult to clean up following spill events, particularly when the spill event includes a release to a stream, river, pond, or lake, where the oil may sink to depth, while the diluents evaporate, are otherwise dispersed into the environment, or are absorbed or ingested by the biota. These characteristics of tar sands oil may result in significant adverse impacts under the criteria. As noted above, the National Surface Transportation Board has identified that effective oil spill removal strategies largely depend on the crude oil mixture's density and its tendency to float or sink in fresh water. The proximity of the Project to numerous fresh water streams, ponds, and river crossings is a significant condition and this proximity further exacerbates the potential impact of a release of tar sands oil from the Project. Information filed by Requestors asserts that the tar sands oil has a tendency to sink in fresh water. This was borne true in the Kalamazoo spill.

Within this framework, it is apparent that the Project has the potential for significant impacts under several Act 250 criteria, including:

Criterion 1B waste disposal, as it relates to management and disposal of cleanup materials from an unplanned spill event;

Criterion 1E streams, as it relates to potential impact from an unplanned spill event;

Criterion 1F shorelines, as it relates to potential impact from an unplanned spill event;

Criterion 1G wetlands, as it relates to potential impact from an unplanned spill event;

Criterion 8 & 8A as it relates to potential impact on rare and irreplaceable natural areas and necessary wildlife habitat from an unplanned spill event;

Criterion 9(K) as it relates to the potential impact on three areas of state lands, from an unplanned spill event.

Accordingly, the Project constitutes a substantial change pursuant to Act 250 Rule 2C(7).

Federal Preemption

Lastly, preemption should be addressed. Federal law does not wholly preempt a state's regulation of pipelines. A state retains general authority to regulate a pipeline's environmental and land-use impacts. Any particular limitation placed on Act 250 by federal law is best addressed at a permitting proceeding when potential permit conditions are weighed.

CONCLUSION

The flow reversal Project, for transport of tar sands oil originating from Alberta Canada requires an Act 250 permit under 10 V.S.A. § 6081(b) because it is a substantial change to a pre-existing development.

Sincerely,

/s/ Kirsten Sultan
Kirsten Sultan, P.E., Coordinator

District #7 Environmental Commission

Reconsideration and Appeal

This is a jurisdictional opinion issued pursuant to 10 V.S.A. § 6007(c) and Act 250 Rule 3(A).

Reconsideration requests are governed by Act 250 Rule 3(B) and should be directed to the district coordinator at the above address. Any appeal of this decision must be filed with the clerk of the Environmental Division Superior Court within 30 days of the date of issuance, pursuant to 10 V.S.A. Chapter 220. The appellant must also serve a copy of the Notice of Appeal on the Natural Resources Board, National Life Records Center Building, Montpelier, VT 05620-3201, and on other parties in accordance with Rule 5(b)(4)(B) of the VRECP.

For further information, see the Vermont Rules for Environmental Court Proceedings, available on line at www.vermontjudiciary.org. The Environmental Court mailing address is: Environmental Division Superior Court, 2418 Airport Road, Suite 1, Barre, VT 05641-8701. (Tel: 802-828-1660)

CERTIFICATE OF SERVICE

I hereby certify that I, Kirsten Sultan, Coordinator, District #7 Environmental Commission, sent a copy of the foregoing document **[JO #7-274]** by U.S. Mail, postage prepaid to the following individuals and entities without e-mail addresses and by e-mail to the individuals and entities with e-mail addresses listed, on this 15th day of April, 2013.

(i) National Wildlife Federation and (ii) Vermont Natural Resources Council and (iii) Sierra Club-Vermont Chapter and (iv) Vermont Public Interest Research Group and (v) 350Vermont and (vi) Conservation Law Foundation and (vii) Natural Resources Defense Council and (viii) Brent and Rona Kinsley and (ix) Ron Holland and Laurie Green and (x) Reed Olsen and (xi) Adam Favalaro

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Vermont Public Interest Research Group (VPIRG) affiliates, list on file at the District 7 Commission office (as provided by Ben Walsh)

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/s/ Kirsten Sultan

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