

UNIVERSITY OF CALGARY
FACULTY OF LAW

LAW 703: LEGAL RESEARCH & METHODOLOGY

CANADIAN TAXATION OF SOVEREIGN WEALTH FUNDS:
ANNOTATED BIBLIOGRAPHY

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INTRODUCTION

This bibliography was prepared for the course Legal Research and Methodology (Law 703) in the fall term of 2012. It contains secondary sources of information relevant to my LL.M thesis research. The topic of my research is the application of the doctrine of sovereign immunity to the taxation of foreign sovereign wealth funds investing in Canada. This bibliography is a work in progress and will be expanded as I continue my research.

A. SECONDARY MATERIALS: MONOGRAPHS

Atlas, Michael I. *Canadian Taxation of Non-Residents*, 4th ed (Toronto: CCH Canadian, 2011).

Michael Atlas is a chartered accountant who practices in the international tax area. CCH is a reputable publisher of practical materials for tax lawyers and accountants. The book is aimed at practitioners. It is helpful for my research because it groups together the various rules for taxation of non-residents that are scattered throughout the *Income Tax Act* (“the Act”) and organizes them into chapters. It includes references to cases that interpret the relevant sections of the Act, interpretation bulletins from the CRA and other important documents. The book does not provide significant analysis of the rules or the policies behind them. It does not address sovereign immunity because the Act does not. However, in the absence of state immunity, sovereign wealth funds are taxed in the same manner as other non-residents, so this book provides a helpful baseline for comparison.

Avi-Yonah, Reuven S. *International Tax as International Law: An Analysis of the International Tax Regime* (Cambridge: Cambridge University Press, 2007).

Badr, Gamal Moursi. *State Immunity: An Analytical and Prognostic View* (The Hague: Martinus Nijhoff Publishers, 1984).

This book provides a detailed and comprehensive overview of the evolution of the doctrine of sovereign immunity since the end of the Second World War. Prior to that time, states were generally accepted to enjoy absolute immunity from the jurisdiction of foreign courts. The shift to the restricted theory of immunity was precipitated by the emergence of socialist states and increased participation in commercial activity by even capitalist states. The author interprets the approaches taken in a variety of jurisdictions, including the United Kingdom, the United States, Canada, Pakistan, Singapore and South Africa, as well as the International Law Association’s draft convention. Badr contends that the doctrine of sovereign immunity is unnecessary because a truly public act of state cannot have extraterritorial effects. In that case, foreign jurisdiction over truly public acts is denied because of the lack of nexus between the act and the foreign country, presumably under the related doctrines *forum non conveniens* or non-justiciability. Badr’s view is consistent with

a strictly territorial notion of sovereignty, which is hard to reconcile with cooperative efforts undertaken by states that are necessarily extraterritorial in their impact. It is also hard to reconcile this view with the persistence of sovereign immunity as a legal doctrine and especially with the (limited) expansion of immunity in the tax context.

Brownlie, Ian. *Principles of Public International Law*, 7th ed (Oxford: Oxford University Press, 2008).

Brownlie's book is the leading general textbook on international law published in English. It was first published in 1966 and has since been translated into five languages. The author was a prominent international lawyer and a distinguished professor of law at Oxford University. The book is divided into 8 parts and is nearly comprehensive in its coverage. However, it lacks specific coverage of international economic law and international fiscal law (tax). Its analysis is sophisticated; the implied audience is already familiar with international law in some detail. The book contains voluminous references throughout, giving the reader the opportunity to pursue topics in greater detail. Of particular interest is Brownlie's chapter on the privileges and immunities of foreign states, as well as the chapter on international treaties. These chapters provide an excellent conceptual overview of sovereign immunity and treaty law, respectively. For my purposes, the chief weaknesses of these chapters is their failure to treat international fiscal law in detail.

Connolly, William E. *Pluralism* (Durham: Duke University Press, 2005).

William E Connolly is a political theorist and the Krieger-Eisenhower Professor of Political Science at Johns Hopkins University. This book is wide-ranging and essayistic, canvassing different facets of pluralism from evil to relativism to the nature of time. Of particular interest to me is the final chapter, "Pluralism and Sovereignty." That chapter explores the tension between legal and political sovereignty, or (to use Connolly's language) between "acting with final authority" and "acting with irresistible power" (at 140). Thanks to this equivocation, sovereignty can point to both the rule of law and the unbridled power to determine the law. Because he wants to create space for pluralism and freedom, Connolly attempts to debunk the notion of sovereignty as a unrestricted power on both normative and theoretical grounds. The ultimate goal is to dissipate sovereignty as a unified field (*pace* Kelsen) while preserving it as a necessary precondition to political order. By emphasizing the multifaceted nature of sovereignty, Connolly's work provides support for the idea that the content of sovereign immunity can be determined contextually.

Dorsett, Shaunnagh & Shaun McVeigh, *Jurisdiction* (New York: Routledge, 2012).

Duff, David G. *Canadian Income Tax Law*, 4th ed (Markham: LexisNexis Canada, 2012).

Kerr, Heather, Ken McKenzie & Jack Mintz, eds. *Tax Policy in Canada* (Toronto: Canadian Tax Foundation, 2012).

La Forest, GV. *The Allocation of Taxing Power Under the Canadian Constitution*, 2d ed (np: Canadian Tax Foundation, 1981).

Morgan, Edward M. *International Law and the Canadian Courts: Sovereign Immunity, Criminal Jurisdiction, Aliens' Rights and Taxation Powers* (Toronto: Carswell, 1990).

Schmitt, Carl. *The Nomos of Earth in the International Law of the Jus Publicum Europaeum*, translated by GL Ulmen (New York: Telos Press, 2003)

B. SECONDARY MATERIALS: COLLECTIONS OF ESSAYS

Cockfield, Arthur J, ed. *Globalization and Its Tax Discontents: Tax Policy and International Investments* (Toronto: University of Toronto Press, 2010).

This is a recent collection of essays from respected scholars and policy makers in the field of international tax law. The collection is both technical and policy-oriented and is therefore intended for an audience that is familiar with tax law and interested in resolving emerging issues in the area of globalization and tax policy. This book does not address either state investors or sovereign immunity; however, it does provide useful context for understanding tax policy issues for international investments. Two essays are particularly relevant to my thesis topic. The first is Jinyan Li's essay on inter-nation equity, which offers a proposal to redistribute income internationally by emphasizing territorial taxation over residence taxation. This argument has the most purchase for trade between developed and developing countries and is therefore of limited application to my thesis. Nevertheless, it provides important criteria for determining the equitable allocation of tax base between countries. Second, Arthur J Cockfield's essay on taxing foreign investment in a non-cooperative setting is an excellent overview of the practical difficulties of achieving international tax policy goals in a zero-sum setting. Given the political difficulties of implementing tax reform, Cockfield provides four criteria (derived from the work of Alex Easson) for achievable international tax reform: reform should be as close to revenue neutral as possible; it should not require the renegotiation of tax treaties; rules should not be excessively complex; and the suggested policy should be capable of unilateral implementation. This is helpful for the portion of my thesis that will make recommendations for legislative reform.

Lang, Michael et al, eds, *Tax Rules in Non-Tax Agreements* (Amsterdam: IBFD, 2012).

This is a recent collection of national reports from over 23 countries. Michael Lang is a prominent tax scholar, and the contributors are experts in the tax law of their countries. The reports describe national approaches to the scope of tax immunity for foreign diplomats, the United Nations, international organizations and cultural exchange offices. This is relevant to

my thesis because diplomatic immunity is conceptually related to sovereign immunity. The work is highly detailed and offers insight into various approaches to tax rule design. The reports are largely descriptive with no attempt by the editors to synthesize the the findings in either an introduction or a conclusion. Nevertheless, the book provides an excellent snapshot of different international approaches and is useful for comparative purposes.

SECONDARY MATERIALS: ARTICLES AND PAPERS

Albrecht, AR, “The Taxation of Aliens Under International Law” (1952) 29 *BYIL* 145.

American Bar Association, Section of Taxation, *Comments on Proposed Regulations Issued Under Section 892* (Washington, DC: ABA, 30 January 2012) (Westlaw).

Brand, Ronald A. “External Sovereignty and International Law” (1995) 18 *Fordham Int’l LJ* 1685 (HeinOnline).

This is a descriptive and polemical piece from a prominent international law scholar on the need for modern conceptions of sovereignty to take into account 20th century developments that undermine the legitimacy of unilateral action in the international sphere, making use of historical and legal analysis. He distinguishes between internal and external sovereignty. Sovereignty, understood as supreme power, is properly an internal concept which describes the supremacy of the state over any other power within its borders subject only to constitutional limits. External sovereignty, in contrast, stands for the principle of non-interference in the domestic matters of other states. However, Brand argues that external sovereignty is waning in response to the transformation of the international arena into a hybrid sphere that mixes states, private individuals and international organizations -- developments rooted in democratic ideals. Brand ignores the parallel development of increased economic integration, a phenomenon whose blessings have been mixed. It is unclear whether he would be equally sanguine about waning fiscal sovereignty.

Burley, Anne-Marie. “Law Among Liberal States: Liberal Internationalism and the Act of State Doctrine” (1992) 92:8 *Colum L Rev* 1907 (Hein Online).

Dietsch, Peter. “Rethinking Sovereignty in International Fiscal Policy” (2011) 37 *Review of International Studies* 2107 (Cambridge Journals).

Dorsett, Shaunnagh & Shaun McVeigh, “Just So: ‘The Law Which Governs Australia Is Australian Law,’” (2002) 13 *Law & Critique* 289 (Springer Link).

This article uses the Australian case *Mabo (No. 2)* and the regulatory regime surrounding native title as a lens through which to examine the relationship of law to state sovereignty. The authors’ central claim is that jurisdiction is the mode by which state sovereignty articulates itself in law. As a process of articulation, sovereignty is historically contingent,

transitional and, ultimately, ideological. The authors have since expanded upon their thesis in the book *Jurisdiction* (see above). Because of the authors' deconstructive approach, they are able to identify the discursive practices that articulate sovereignty. A weakness of this approach is that it does not provide a normative basis for explaining why sovereignty should be retained or abandoned. While it makes for fascinating reading, the article is not particularly helpful for developing policy recommendations of the sort I intend to advance in my thesis. However, by drawing together the connections between jurisdiction and sovereignty it has helped clarify my understanding of the relationship between sovereign immunity and tax jurisdiction.

Kelsen, Hans. "Sovereignty and International Law," (1960) 48:4 *Geo LJ* 627.

This essay is an examination of sovereignty from a major legal theorist. Kelsen argues that the state is identical with its law; put differently, the "state" is the personification of a specific legal order. State sovereignty means that the legal order of the state is not subject to any superior legal order. This leads to the question of which is truly sovereign: the national legal system or the international legal order? Kelsen concludes that there is no objective ground on which to answer this question. In contrast to other authors who emphasize the multiple and contextual faces of sovereignty, Kelsen presents it as a durable and unified concept. Unlike Connolly or Dorsett & McVeigh, Kelsen's theory of sovereignty is strictly logical and hierarchal. This rigidity, coupled with the conclusion that the issue of primacy cannot be resolved, limits the application of Kelsen's ideas.

Martha, Rutsel Silvestre J. "Extraterritorial Taxation in International Law," in Karl M Meessen, ed, *Extraterritorial Jurisdiction in Theory and Practice: Symposium Held in Dresden Between 8 and 10 October 1993* (Martinus Nijhoff Publishers, 1996).

Rutsel Martha is an adjunct professor of law at New York University and the former Minister of Justice for the Netherlands. This essay is a summary of the arguments presented in Martha's book *The Jurisdiction to Tax In International Law* (1989), which won the International Fiscal Association's Mitchell B Carroll Prize. It is directly relevant to my thesis, as it addresses the limits of tax jurisdiction in international law. It is also unique in addressing public international law as a limitation on states' taxing power. The article canvases different limits on fiscal jurisdiction, but does not consider sovereign immunity. Published in 1996, its overriding concern is the problem of double taxation, which has largely been solved by the modern tax treaty network. Nevertheless, Martha grounds his arguments in principles of international law that are still applicable today and which shed light on the current problem of sovereign immunity from taxation.

Musgrave, Peggy B & Richard A Musgrave, "Inter-nation Equity" in Richard M Bird & John G Head, eds, *Modern Fiscal Issues: Essays in Honor of Carl S Shoup* (University of Toronto Press, 1972).

Peggy Musgrave & Richard Musgrave are the authors of the classic textbook on public finance *Public Finance in Theory and Practice* (1972). They are arguably the most recognized authors in the discipline. This article provides structural analysis of revenue sharing between countries under a variety of different tax schemes. Inter-nation equity, they argue, can be achieved by assigning the primary right to tax to the source country, while the residence country modifies its own taxation by permitting either the crediting or deduction of foreign taxes against domestic tax. The residence country can choose different tax rules according to whether it wants to achieve equal treatments between domestic taxpayers or whether it wants to promote or discourage investment abroad. The strength of the article is its clear analysis of the different revenue and distributional consequences of various tax rules. One weakness is the somewhat thin notion of equity used. It is unclear how inter-nation equity is “resolved” by unilateral action on the part of the source jurisdiction. As a practical matter, the source country has the greatest ability to collect the tax, but that in no way means that revenues have been divided equitably.

Joy, Vijay & Jack Mintz. “Sovereign Wealth and Pension Funds Controlling Canadian Businesses: Policy Implications,” (2012) [unpublished, on file with author].

This article, which is currently under review for publication, is by the Palmer Chair in Public Policy at the University of Calgary. Professor Mintz is a world-renowned expert in fiscal and tax policy who is frequently consulted by the World Bank, the IMF, the OECD and the Government of Canada. The article discusses tax policy concerns with tax-exempt SWFs and pension funds acquiring control of Canadian companies; as such, it is not directly relevant to my research on portfolio investment. Nevertheless, it provides a helpful example of how economic analysis can highlight concerns about the tax-exempt status of SWFs. Tax exempt entities have a competitive advantage over private firms since they have a lower tax cost of production. This allows them to essentially participate in tax arbitrage, outbidding taxable firms for acquisition of control of Canadian businesses. Given this advantage, the winner in a takeover contests might not be determined because of efficient factors like managerial expertise and synergies. Since tax exempt entities have more after-tax dollars available to them, they can outbid for Canadian business assets leading to market distortion.

Mintz, Jack & Duanjie Chen. “Capturing Economic Rent from Resources through Royalties and Taxes” (2012) *SPP Research Papers* 50:30.

Philpott, Daniel. “Sovereignty: An Introduction and Brief History” (1995) 48:2 *Journal of International Affairs* 353 (Academic Search Complete).

This article provides a helpful introduction to the concept of sovereignty in international law and relations from an author who has published extensively in this area. Philpott sovereignty as “supreme legitimate authority within a territory” and takes the position that norms of sovereignty form an international law constitution, contrary to *realpolitik* views of international “legality.” Philpott’s approach would likely be criticized by Brand, who is

critical of understandings of international law that treat it as a second-tier social contract between nations. Of particular interest is Philpott's distinction between sovereignty's regulative and constitutive faces, which he uses to distinguish the essential prerogative powers of sovereignty -- including taxation power. This article is perhaps the most useful to me because the vision of sovereignty it articulates is most consistent with the content of the doctrine of sovereign immunity.

Rose-Ackerman, Susan. "Unfair Competition and Corporate Income Taxation" (1982) 34:5 Stanford L Rev 1017.

Rosenbloom, H David. "International Tax Arbitrage and the 'International Tax System'" (David R Tillinghast Lecture, delivered at the NYU School of Law, 1 October 1998), (1999) 53 Tax L Rev 137 (Hein Online).

SECONDARY MATERIALS: GOVERNMENT DOCUMENTS

Canada Revenue Agency, Information Circular 77-16R4, "Non-Resident Income Tax" (11 May 1992).

US, Joint Committee on Taxation, *Economic and US Income Tax Issues Raised by Sovereign Wealth Fund Investment in the United States* (JCX-49-08) (17 June 2008), online: <www.jct.gov>.

NEWSPAPER ARTICLES

Baston, Andrew. "China Used Reserves to Sway Costa Rica," *Wall Street Journal* (13 September 2008) online: <<http://www.wsj.com>>.

Costa Rican government documents, released by court order, reveal that China's State Administration of Foreign Exchange purchased \$300M in government bonds from Costa Rica between 2007 and 2009. In exchange Costa Rica switched its diplomatic ties from Taiwan to Beijing, a phenomenon called "checkbook diplomacy."

"U.S. should use as political lever its tax break on sovereign funds," *Wall Street Journal* (14 March 2008) online: <<http://www.wsj.com>>.

This op-ed posits that the U.S. should make transparency and fair investment rules a precondition for tax exemption of sovereign funds.

Analyzing Linkage of Cap-And-Trade Systems: a Case Study in How California and Quebec Linked Their Cap-And-Trade Systems

Annotated Bibliography (In Progress)

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December 2012

This is an annotated bibliography for my major research project as an LL.M. candidate at the University of Calgary. It is a work in progress and should not be taken as exhaustive of the relevant literature.

My research objective is to identify the design elements that cap-and-trade systems must have in order to be linked; this criteria will be obtained from the analysis that I conduct on the case study about the linkage between California and Quebec's cap-and-trade systems.

This annotated bibliography is divided into five sections: (a) legislation; (b) monographs; (c) articles; (d) online sources; and (e) international treaties. Only twelve entries are annotated for the purpose of Law 703 assignment.

LEGISLATION

Bill 42, An Act to amend the Environment Quality Act and other legislative provisions in relation to climate change, 1st Sess, 39th Leg, Quebec 2009.

California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms, 17 CCR § 95800.

OC 1297-2011, 28 June 2012, (2012) GOQ II, 3655 s 2.

US, AB, 32, And Act to add Division 25.5 to the Health and Safety Code, relating to air pollution, 2006, Reg Sess, Cal, 2006 s 1.

SECONDARY MATERIALS: MONOGRAPHS

Ali, Paul AU & Kanako Yano. *Eco-Finance: The Legal Design and Regulations of Market-Based Environmental Instruments* (Netherlands: Kluwer Law International, 2004).

Brohe, Arnaud, Nick Eyre & Nicolas Howarth. *Carbon Markets: An International Business Guide* (NY: Earthscan, 2009).

Gutbrod, Max, Sergei Stinikov & Edith Pike-Biegunska. *Trading in Air Mitigating Climate Change Through the Carbon Markets* (Infotropic Media, 2010).

Salomon S et al. *Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge, UK: Cambridge University Press, 2007).

Yamin, Farhana. *Climate Change and Carbon Markets: A Handbook of Emissions Reduction Mechanism* (London, UK: Earthscan, 2005).

SECONDARY MATERIALS: ARTICLES

Bennett, Lisa. "Are Tradable Carbon Emissions Credit Investments? Characterization and Ramifications under International Investment Law" (2010) 85:5 NYUL Rev 1581.

Bernstein, Steven et al. "A Tale of Two Copenhagens: Carbon Markets and Climate Governance" (2010) 93:1 Millennium: Journal of International Studies 161.

Boom, Jan-Tjeerd & Dijkstra R Bouwe. "Permit Trading and Credit Trading: A Comparison of Cap-Based and Rate-Based Emissions Trading Under Perfect and Imperfect Competition" (2009) 44:1 Environmental and Resource Economics 107.

Bramley, Mathew, PJ Partington & Dave Sawyer. "Linking National Cap-and-Trade Systems in North America Clean Energy and Climate Action: A North American Collaboration" (2009), online: International Institute for Sustainable Development <http://www.iisd.org/pdf/2009/linking_nat_cap_north_america.pdf>.

The main objective of this article is to clarify when cap-and-trade systems can be linked with other systems. The authors are researchers at Pembina Institute and professors at different universities. Their main areas of study are climate change and economics. The authors' main argument is that governments in North America (Canada, Mexico and United States) should consider to link national cap-and-trade systems. After an overview of the cap-and-trade systems that are active in North America, the authors analyze benefits and risks of linking cap-and-trade systems. The authors conclude that due different climate change policies, in a short term, it would be difficult to link carbon emission trading system in a federal level, even though linking cap-and-trade systems bring economic benefits for three countries. This article is intended for an audience that is aware of benefits of linking cap-and-trade systems such as regulators, and policy makers. At the end of the article, the authors have a detailed analysis of which cap-and-trade design elements need to be harmonized to allow linking. This last table will contribute to my research because will help me to build my criteria to analyze California and Quebec's cap-and-trade regulations.

Bryner, Gary. "Reducing Greenhouse Gases Through Carbon Market" (2008) 85:4 Denv UL Rev 961.

The main objective of this article is to explore challenges that governments face when implementing cap-and-trade systems; it also provides suggestions on how to address those challenges when designing a cap-and-trade program. The author is professor of Public

Policy Program at the Department of Political Science of Brigham Young University, his main area of study is environmental law. The author's main argument is that countries need to implement cap-and-trade programs to work collaborative in order to reduce climate change. The author believes that even though implementing cap-and-trade systems brings more burden to policy makers when creating comprehensive program, benefits and the commitments from industry will help to implement a successful program. The author explains how cap-and-trade programs work and lists benefits when implementing this type of program; also he states that carbon emissions are externalities and thereby the main objective of cap-and-trade programs is to ensure markets to reflect true costs. The author concludes that there are eight elements that cap-and-trade systems need to have in order to be effective, and states that regional programs are more developed than national cap-and-trade systems. However, the author mentions that a major problem with regional programs is that they may reduce emissions within the participating states, emissions may increase outside the boundaries. This article is intended for an audience that is aware of benefits of linking cap-and-trade systems such as regulators, and policy makers. The article provides a detail explanation on how carbon market works and provides a useful list of design elements for cap-and-trade systems. However, the list is not for linking ETS, this list will contribute to my research project to better understand the dynamics of carbon markets.

Button, Jillian. "Carbon: Commodity or Currency? The Case for an International Carbon Market Based on the Currency Model" (2008) 32 Harv Env'tl L Rev 571.

Buzbee, William W. "State Greenhouse Gas Regulations, Federal Climate Change Legislation, and the Preemptive Sword" (2009) 1 San Diego Journal of Climate & Energy Law 23.

Childs, J Scott. "Continental Cap-And-Trade: Canada, the United States, and climate change partnership in North America" (2010) 32:2 Hous J Int'l L 393.

The main objective of this article is to propose a continental cap-and-trade framework between Canada and the United States and later with Mexico. The author completed an LL.M. in Energy, Environment and Natural Resources Law at the University of Houston Law Center in May 2009, where his focus was on petroleum transactions and cap-and-trade legislation. The author's main argument is that based on Canada and the U.S.'s energy market relation, a comprehensive cap-and-trade framework would help to reduce GHG emissions and thereby meet their environmental goals. The author describes in detail the political situation in regard to the cap-and-trade legislations in the U.S. and collaborative relations between Canada and the U.S. in energy matter. The author also describes the regional cap-and-trade systems that are in place in the U.S., especially RGGI and WCI. The author identifies that cap-and-trade regulations must address accurately and uniformly methods to measure GHG emissions and recommend using Chicago and Montreal Climate Change as organizations to facilitate transactions of GHG allowance for transparency in price. The author identifies two situations that could affect the development of this comprehensive framework: oil sands production in Alberta and the use of coal for electricity production the U.S. The author concludes that a continental cap-and-trade would be beneficial for both countries, even though there are situation that could affect this linkage, such as, oil sands and coal-production. This article is intended

for an audience that is aware of benefits of linking cap-and-trade systems such as regulators, and policy makers. This article provides detail political information about the bilateral relation between the U.S. and Canada in regard to the cap-and-trade framework, which will be helpful to understand the background of regional programs. This article also will contribute to my research project because it provides me with the political background when I analyze Quebec and California's regulation.

Dellink, Rob et al. "Towards Global Carbon Pricing: Direct and Indirect Linking of Carbon Markets" (2010), online: Organisation for Economic Co-operation and Development <<http://www.oecd-ilibrary.org/docserver/download/5km975t0cfr8.pdf?expires=1355376537&id=id&accname=guest&checksum=201F16838240840994515DB2DE57630E>>.

The main objective of this article is to assess the economic effects of direct and indirect linking of ETSs in countries that are part of the Annex I under Kyoto Protocol. The authors are economists working for the OECD and this article is based on analysis in the OECD 2009 book "The Economics of Climate Change Mitigation Policies and Options for Global Action Beyond 2012". The authors' main argument is that ETSs play an important role to reduce GHG and thereby creating an international trading system by linking domestic carbon markets can increase environmental ambition and the cost-effectiveness of international actions. The authors recognize that there are three results that are met when linking carbon market: (1) the greater the difference in carbon prices across countries prior to linking, the larger the cost savings; (2) the cost-saving potential for developed countries of well-functioning crediting mechanisms is large; and, (3) the mitigation costs savings from direct linking of ETSs are much smaller than those from indirect linking through a well-functioning crediting mechanisms. The authors identify three major risks that have to be addressed when linking ETSs: lack of market liquidity; risk associated with the development of derivative markets; and, market dysfunction. The authors conclude that even though there are major risks when linking ETSs, it is important that policy makers and regulators take those risks into account when addressing possible solutions to have a global carbon market that brings more benefits and avoid any failure in the market. This article is intended for an audience that is aware of benefits of linking cap-and-trade systems such as regulators, and policy makers. This article identifies several design elements of the carbon trade systems that could create major risks, the difference with other articles that I have reviewed is that this article provides economic background and explanation of those risks. This article will be useful to my research project because provides me with economic information that is necessary for analyzing cap-and-trade regulations in my case study.

Flachsland, Christian, Robert Marschinski & Ottmar Edenhofer. "To link or not to link: benefits and disadvantages of lining cap-and-trade systems" (2011), online: Postdam Institute for Climate Impact Research <http://www.pik-potsdam.de/members/edenh/publications-1/flachsland_et_al_tolinkornottolink>.

The main objective of this article is to develop a comprehensive framework to assess benefits and drawbacks when linking two cap-and-trade systems. The authors are researchers at the Postdam Institute for Climate Impact Research and professors at

different universities. The author's main area of research and study is climate change and economics. The authors identify that linking cap-and-trade systems will bring economic and political benefits; however, it also brings challenges, which are related to the regulatory implications. The authors' point of view is that in order to ensure proper functioning of linked systems, harmonization of basic design features is necessary because cap-and-trade systems will be combined. The authors' argument is that differences in design elements could be problematic only when there is a conflict over policy priorities. The authors believe that when linking cap-and-trade systems, jurisdictions might lose exclusive control and authority over the carbon market is ceded, and adequate joint governance arrangements and mutual trust constitute an important prerequisite for any linking project. The authors conclude that policy makers have to weigh up and quantify the impacts of each issue to determine whether not to link their cap-and-trade systems. This article is intended for an audience that is aware of benefits of linking cap-and-trade systems such as regulators, and policy makers. This article is different from the other ones that I have reviewed because the authors draw a direct relation between policy objectives and emission trading systems design features. This article will contribute to my research project because it lists benefits that linking cap-and-trade systems would bring, and provides me with a new type of assessment when I analyze California and Quebec's cap-and-trade regulations.

Gilbert, Alyssa. "Linking Carbon Markets: The Climate Change Silver Bullet?" (2009) 20:6 *Energy & Environment* 901.

The main objective of this article is to clarify impacts of direct linkage of cap-and-trade systems in climate change policies and determine its benefits, risks and challenges to achieve a single carbon global market. The author is a unit manager for market based mechanisms at Ecofys. She has worked on major policy evaluation and development studies in emissions trading. The author's main argument is that formation of linkage between existing or planned carbon markets is an important step towards the development of a global market. The author states that the direct linkage is more effective to create a global carbon market; thereby, her analysis focuses on this type of linkage. The author identifies five advantages of linking systems and six risks, mainly economic, that could affect the development of linking cap-and-trade systems. The author establishes a criteria to determine if cap-and-trade systems could be compatible among them, based on: technical design; ambition level, and maturity. She analyzes each cap-and-trade system to see if which elements are included in the systems in order to identify if based on her criteria analyzed cap-and-trade systems could be linked. She identifies essential design elements in cap-and-trade systems to link systems, and concludes that there are some technical and political challenges that will need to be overcome to link cap-and-trade systems. This article is intended for an audience that is aware of issues of linking cap-and-trade systems such as regulators and policy makers. This article, as others that I have reviewed, identifies benefits and risks of linking cap-and-trade systems and creates criteria to identify essential design elements in cap-and-trade systems. This article will help me to build my criteria to analyze cap-and-trade systems from Quebec and California, in order to identify essential design elements that California and Montreal modified to link their cap-and-trade systems.

Harrison, Rachel Feinberg. "Carbon Allowances: A New Way of Seeing an Invisible Asset" (2009) 62:4 SMU L Rev 1915.

Hepburn, Samantha. "Carbon Rights as New Property: The Benefits of Statutory Verification" (2009) 31 Sydney Law Rev 239.

Howland, Juliet. "Not all the Carbon Credits are Created Equal: The Constitution and the Cost of Regional Cap-and-Trade Market Linkage" (2009) 27:2 UCLA J Envtl L & Pol'y 413.

The main objective of this article is to identify possible issues that California's cap-and-trade system would face whether it decides to link with other regional and international ETSs, and proposes solutions to solve the issues when linking cap-and-trade systems. The author is a lawyer in Akin Gump Strauss Haver & Field LLP firm, and she practices in global project finance, and focuses primarily on renewable energy project development and financing. The author states that there are economic, environmental and political benefits for California when linking with other cap-and-trade systems. The author considers that members of WCI, RGGI and EU ETS are good candidates to link with California. The author's main argument is that California needs to link with other cap-and-trade systems, but in order to do that it is necessary to establish mechanisms to analyze and identify whether possible cap-and-trade systems are well design and thereby are compatible with California. The author uses doctrinal methodology and proposes implementation of two regulations that will help California to link with well-design systems. However, the author does not explain in detail when a cap-and-trade is considered to be well designed system. The author concludes that California, either alone or as part of WCI, should consider adopting regulations that would set standards for the cap-and-trade markets it will link with. This article is intended for an audience that is aware of issues of linking cap-and-trade systems such as regulators, lawyers and policy makers. This article provides more specific information than other articles because it analysis of how to link California's cap-and-trade systems with other systems through the implementation of new legislations. However, the author does not clearly identify why implementation of regulations is the best option. This article will be helpful when I analyze California's regulations.

Jaffe, Judson & Robert N Stavins. "Linkage of Tradable Permit System in International Climate Policy Architecture" (2008), online: Belfer Center for Science and International Affairs <http://belfercenter.ksg.harvard.edu/publication/18580/linkage_of_tradable_permit_systems_in_international_climate_policy_architecture.html?breadcrumb=%2Fexperts%2F1559%2Fjudson_jaffe%3Fback_url%3D%252Fpublication%252F18580%252Flinkage_of_tradable_permit_systems_in_international_climate_policy_architecture%26back_text%3DBack%2520to%2520publication>.

The main objectives of this article are to examine benefits and risks associated with linkage of international cap-and-trade systems, and analyze how linkage may become part of the post-2012 international climate policy architecture. At the time of writing this article, Judson Jaffe was vice-president at Analysis Group and Robert N. Stavins was Albert Pratt Professor of Business and Government, Harvard Kennedy School. The authors' main argument is that when linking tradable permits systems it is necessary to

assess major design elements of each cap-and-trade system. The authors emphasize that effects when linking cap-and-trade systems will depend on the type of linkage established and characteristics of the linked systems. The authors assess three ways in which linkage can contribute to future climate policy architecture: as an independent; as a transition to a top down architecture; and, as element of a larger climate agreement. The authors conclude that in the near-term, linkage will continue to grow in importance as a core element of a bottom-up de facto international policy architecture. The authors also conclude that in the longer term, linkage could play a variety of roles depending on the policy commitments of each jurisdiction. This article is intended for an audience that is aware of benefits of linking cap-and-trade systems such as regulators, and policy makers. Unlike the other articles that I have reviewed, this article recognizes the important role of international cooperation to develop linkage among different cap-and-trade systems. This article will contribute to my research project because provides me with broader perspective to analyze cap-and-trade regulations that is international climate policy.

Mace, MJ, Jason Anderson. "Legal and Design Issues Arising in Linking the EU ETS with Existing and Emerging Emissions Trading Schemes" (2009) 6:2 *Journal for European Environmental & Planning Law* 197.

The main objective of this article is to provide an overview of the possibility of linking EU ETS with other cap-and-trade systems and description of the legal form to link ETSs, and identify key design elements of existing and emerging ETS and essential elements that are necessary to link ETSs. MJ Mace is a professor at SOAS, University of London and her main area of study is international climate change; she has been a member of the Kyoto Protocol Compliance Committee since 2006. Jason Anderson's area of study is also climate change, and he is the head of the EU Climate & Energy Policy at the WWF European Policy Office. The authors' main argument is that even ETS that are quite different have the possibility to be linked when their essential design elements are compatible. The authors identify four overarching principles that should guide any consideration of how and whether to link trading systems: (1) environmental integrity, (2) institutional compatibility, (3) economic efficiency, and (4) equity. The authors provide a list of design elements for ETS and group them into two categories: (a) elements that must be consistent, and (b) elements that should be consistent. The authors also make another classification of the design elements depending of the legal form of the linkage between ETS. The authors recognize that the schemes can be linked in four different ways: (1) binding international treaties; (2) mutual recognition of allowance by way of reciprocal rules in domestic law of participating jurisdictions; (3) purely political arrangements; and (4) unilateral linkages. The authors explain elements that are necessary to choose the appropriate form of link ETS. The authors conclude that GHG ETS are evolving at different rates, at different levels and standards, but linking ETS is the best option to conform a global carbon market. To link EU ETS with other system, the authors conclude that the best legal form to do it is through a national level ETS and implementing a bilateral treaty or political arrangement. This article is intended for an audience that is aware of issues of linking cap-and-trade systems such as regulators, lawyers and policy makers. This article provides a list of key design elements of ETSs and introduces the legal form to link those ETS, which is different perspective from the other articles. It is also useful because the authors introduce the legal elements in their analysis.

This article will help me because the authors explain in detail the legal form to link ETSS and based on that information, I will be able to analyze if the legal form that California and Montreal used to link their cap-and-trade systems.

Prag, Andrew et al. "Keeping Track: Options to Develop International Greenhouse Gas Unit Accounting After 2012" (2011), online: Organisation for Economic Co-operation & Development <<http://www.oecd.org/env/climatechange/48125645.pdf>>.

Rose, Carol M. "From H₂O to CO₂: Lessons of Water Rights for Carbon Trading" (2008) 50:1 Ariz L Rev 91.

Souchik, Laura E. "Accounting for Emissions Trading: How Allowances Appear on Financial Statements could Influence Effectiveness of Programs to Curb Pollution" (2012) 39:2 BC Envtl Aff L Rev 475.

The main objective of this article is to propose comprehensive regulations to establish system for accounting and reporting on cap-and-trade systems. The author when writing this article was the Editor of the Boston College Environmental Affairs Law Review; she holds an Accounting and Law Degree. The author's main argument is that accounting systems are necessary to provide transparency to cap-and-trade's financial information. The author provides detail background and history about American and international cap-and-trade systems. The author emphasizes that regional programs are more developed than the federal programs because there are not federal's climate change regulations. After an overview of the most current systems that are in the U.S. and in international markets, the author concludes that the accuracy of accounting information is essential to uphold the integrity of global financial systems and thereby also proposes a comprehensive accounting system to increase effectiveness of cap-and-trade legislation. This article is intended for an audience that is aware of benefits of linking cap-and-trade systems such as regulators, and policy makers, but with Accounting knowledge. This article, comparing with the other that I have cited, provides me with more technical information related to accounting and reporting systems. This articles will contribute to my research project because it provides a detail overview on how the structure of cap-and-trade systems work. Finally, the article also provides me with a useful overview of the regional programs that are being developed in the U.S., such as WCI.

Sterk, Wolfgang, Michael Mehling & Andreas Tuerk. "Prospects of linking EU and US Emission Trading Schemes: Comparing the Western Climate Initiative, the Waxman-Markey and the Lieberman-Warner Proposal" (2009), online: Climate Strategies <<http://www.climatestrategies.org/research/our-reports/category/33/143.html>>.

Turk, Andreas et al. "Linking Emissions Trading Schemes" *Climate Strategies* (2009), online: Climate Strategies <<http://www.climatestrategies.org/research/our-reports/category/33/148.html>>.

The main objective of this article is to evaluate possible forms of linking Emissions Trading Schemes (“ETS”), determine feasible issues that cap-and-trade schemes could face when linking their systems, and determine legal and normative requirements in the context of linking ETS. The authors are university professors, researchers at environmental institutes or members of Climate Strategies. Their areas of study are on climate change policies and instruments to combat climate change, such as emissions trading. The authors’ main argument is that even though current ETS are different, linking them could bring more benefits to the global carbon market and to national and international climate policies. The authors’ analysis focuses on the direct linkage of systems because it involves modification to regulations and brings more certainty to the linkage and commitment among ETS. The authors use case study methodology to identify five elements that are barriers to link ETS, and conclude that cap-and-trade systems should try to harmonize these elements to link their systems. This article will contribute to my research because of the methodology that was used and the analysis on direct linkage between ETSs.

Zetterberg, Lars “Linking the Emissions Trading Systems in EU and California” (2012), online: FORES <<http://www.scribd.com/doc/109747461/Linking-the-Emissions-Trading-Systems-in-EU-and-California>>.

The main objective of this article is to investigate whether EU ETS cap-and-trade system and California ETS could be linked based on their design elements. Lars Zetterberg is a senior Scientist and Director Business Development at the Swedish Environmental Research Institute. He holds a Ph.D. in Physical Geography from the University of Gothenburg and M.Sc. in Engineering Physics from Chalmers University of Technology. The author identifies not only economic benefits when linking cap-and-trade systems, but also benefits that have international connotations; he believes that linking ETSs will promote international collaboration and commitment to long-term climate policy and multilateralism. The author states that is not necessary that all the design elements have to be the same; however, he identifies certain elements that are critical in order to link cap-and-trade systems. The author also identifies political implications, but he does not develop those matters because are not part of the scope of his paper. The author analyzes the prospects for linking EU ETS with a Californian scheme, and identifies six design elements of the cap-and-trade systems that are essential to link. The author concludes that even though there are major differences between the EU ETS and California cap-and-trade scheme, he believes that political will, solve the current barriers to linking the EU ETS and the California scheme. The author’s methodology is literature review and comparative law when analyzing the EU ETS and the California cap-and-trade systems. This article is intended for an audience that is aware of benefits of linking cap-and-trade systems such as regulators, and policy makers. This article will contribute to my research because it analyzes California’s cap-and-trade system and identifies essential design elements for cap-and-trade systems.

OTHER MATERIALS: ELECTRONIC SOURCES

California Air Resources Board < <http://www.arb.ca.gov/homepage.htm> >.

Ministry of Sustainable Development, Environment, Wildlife and Parks of Quebec
< http://www.mddep.gouv.qc.ca/regards/inter_en.htm >.

Western Climate Initiative <<http://www.westernclimateinitiative.org>>

OTHER MATERIALS: INTERNATIONAL TREATIES

United Nation Framework Convention on Climate Change, 9 May 1992, 1771 U.N.T.S. 107
(entered into force 21 March 1994), online: United Nations Framework Convention on
Climate Change < <http://unfccc.int/2860.php> >.

UNIVERSITY OF CALGARY
FACULTY OF LAW

LAW 703: LEGAL RESEARCH AND METHODOLOGY

ANNOTATED BIBLIOGRAPHY

BY

NELSON ATANGA AYAMDOO

14 DECEMBER 2012

ANNOTATED BIBLIOGRAPHY

This annotated bibliography, twelve in number, contains selected secondary sources of information relevant to my LL.M thesis research at the University of Calgary. My thesis is on the topic: “Environmental Concerns in Ghana’s Oil Fields: Exploring the Compulsory in Insurance Option”. The thesis focuses on the role of insurance in the prevention and or mitigation of environmental pollution from petroleum operations.

SECONDARY MATERIAL: ARTICLES

Allen, Jacqueline, “A Global Oil Stain- Cleaning Up International Conventions for Liability and Compensation for Oil Exploration/Production” (2011) 25 Austl & NZ Mar LJ 90.

The author focuses on the failures of Australian legislation as well as international conventions to address liability for pollution clean-ups, compensation for environmental damage and offshore rig insurance in the event of oil spills and well blowouts. The author argues that the oil industry is a global industry and therefore there is the need for a global regulatory regime to cover oil rigs instead of the desperate and piecemeal attempts by individual coastal countries. The author suggests that to regulate internationally the environmental aspects of oil rigs, the *International Convention on Civil Liability for Oil Pollution Damage 1992* and the *International Convention on the Establishment of an International Fund for Oil Pollution Damage 1992* should expressly incorporate oil rigs or alternatively the international community should consider a separate convention for oil rigs. The article is relevant as it painstakingly traces international, regional and national attempts to regulate oil pollution liability, compensation and environmental clean-up resulting from offshore oil platforms.

Bosma, Shane, “ The Regulation of Marine Pollution Arising from Offshore Oil and Gas Facilities-An Evaluation of the Adequacy of Current Regulatory Regimes and the Responsibility of States to Implement a New Liability Regime” (2012) 26 A&NZ Mar LJ 89.

Bosma’s article examines the lack of international political consensus in regulating the civil liability of offshore oil and gas facilities and identifies that the lack of consensus on the civil liability of offshore facilities has resulted in inadequate and unsatisfactory regional and national attempts to regulate offshore facilities. Using the examples of Deepwater Horizon Macondo Spill in US and the Montara Spill in Australia, Bosma argues that offshore oil and gas exploration and production is a high risk activity that has transboundary implications and coastal states may be saddled with liabilities for harm to other coastal states as a result of the absence of or inadequate offshore marine pollution regimes. Bosma further argues that since there is an emerging principle in international law to impose strict liability for abnormally dangerous activities, there is the need for a strict liability civil convention for oil pollution from offshore facilities which must be backed by a compulsory insurance liability scheme to address the existing inadequacies. The article is relevant to my thesis because the author delves into national and regional attempts to use compulsory insurance and other financial liability schemes to solve offshore pollution problems.

Faure, Michael G, “Economic Criteria for Compulsory Insurance” (2006) 31:1 The Geneva Papers on Risk and Insurance-Issues and Practice 149.

The author is a Professor of Law at Maastricht University. In this article, the author discusses the criteria for compulsory insurance from the perspective of economics. The discussion is premised on the traditional economic approach that regulatory intervention is warranted upon market failures. The author states that the set criteria for the legislator to impose compulsory insurance, whether victim or liability insurance, should be: (a) where there is an information deficiency problem, in the sense that a risk averse party fails to take up insurance coverage because of lack of information on the benefits of insurance, and (b) where there is the risk of insolvency of the injurer with its resulting under deterrence and judgment proof problems. The author however sounds the warning that compulsory insurance would only work if moral hazards can be controlled and there is a willing and ready market for the insurance. This article is relevant to my thesis for two reasons. First, the criteria set out by the author would be used to evaluate the Australian mandatory offshore petroleum insurance regime (the comparator) and second, it provides literature on the criteria to consider in constructing a compulsory insurance regime in Ghana.

Faure, Michael, G. & Wang, Hui, “Financial Caps for Oil Pollution Damage: A Historical Mistake?” (2008) 32 Marine Policy 592.

In this article, Faure and Wang question the rationale of financial caps for oil pollution damage if the aim of the liability system is to ensure adequate victim compensation. The authors identify that the most important historical reasons for limiting liability, which seemed to have informed the negotiations for the drafting of the *International Convention on Civil Liability for*

Oil Pollution damage, 1969 was to limit liability in order to make the liability insurable. The authors further find that historically liability was not limited when third parties were involved, the limitation only applied to a ship owner and an injured in a contract relationship. Faure and Wang argue that liability need not be limited to make it insurable since liability could be unlimited but not the insurance. Faure and Wang are Law Professors at Maastricht University, Netherland and Catholic University of Leuven, Belgium respectively. The article would inform the discussion in my thesis whether the compulsory insurance for offshore pollution liabilities should be limited or not.

Katzman, Martin, T., “Pollution Liability Insurance and the Catastrophic Environmental Risk” (1988) 55:1 *The Journal of Risk and Insurance* 75.

The author analyzes insurance as a type of financial responsibility guarantee to undertake activities with catastrophic environmental risks. The author states that activities with high risks must be compelled to internalize the costs of those risks in their activities. The regimes that can compel internalization of risks are tort law, statutory regulation and user charges and insurance falls under the user charges regime. The author canvases that discretionary financial responsibility requirement is not sufficient in pollution cases of toxic chemicals and oil spills because they present special problems and mandatory insurance is the way to go. The author dispels the notion that ecosystem damage in environmental liability is not verifiable because advancements in science and actuarial studies make it possible to ascertain ecosystem damages to some degree of certainty. The author is a Professor of Economics and Environmental Sciences at the University of Texas at Dallas. This article would inform discussions in my thesis on the ascertainment of ecosystem damage for the purpose of insurance.

McDonald, Jan “The Insurance Implications of Environmental Liabilities” (1997) 9 ILJ 79.

The author as at the time of writing this article was an Associate Professor of Law at Bond University but is now a Professor of Law at University of Tasmania. The article explores the insurance implications of environmental liabilities in the wake of increased common law and statutory duties to clean up contaminated lands. The author first argues that mandatory insurance is a better proof of financial responsibility than performance bonds and bank guarantees to undertake hazardous activities because insurance has the objective of preventing or minimizing the environmental harm and where mandatory insurance is imposed, there is a larger pool of resources to meet remediation efforts. Second, the author writes that where the proof of financial responsibility means insurance two issues arise: (i) Enterprises with low environmental record or environmentally poor operations would be compelled to adopt appropriate environmental safety mechanisms or would be prevented from undertaking the activity because no insurer would be willing to underwrite the liabilities of such an enterprise; and (ii) Insurers might become surrogate regulators of the enterprise and thereby help improve the environmental assessment processes. In the design of the compulsory insurance for environmental liabilities, the author suggest that premiums should be calculated using a system of retroactive indexing of insurance premiums and a forward index that measures expansion of legal liabilities. Although the article is more than a decade old and addresses a different ecosystem, the augments on the advantages of mandatory environmental insurance seem valid for my thesis.

Orts, Eric, W., “Reflexive Environmental Law” (1995) 89 Nw U L Rev 1227.

The author seeks to construct a theory of reflexive environmental regulation as an alternative and response to the failures of command-and-control regulation and market-based environmental regulation. The reflexive-style regulation seeks to solve monitoring and compliance problems by offloading some of the weight of monitoring and compliance from regulatory bodies to other social actors. Reflexive regulation also seeks to communicate to economic actors the costs and risks of their activities to the environment in order to induce responsible environmental behaviour. Benjamin Richards, “Mandating Environmental Liability Insurance” (2001-2002) 12 Duke Env'tl L & Pol'y F 293 agrees that mandatory insurance is an instrument for reflexive-style regulation.

Richardson, Benjamin J, “Mandating Environmental Liability Insurance” (2001-2002) 12 Duke Env'tl L & Pol'y F 293.

The article discusses two important issues, that is, how can insurance manage environmental risks and whether environmental insurance should be compulsory. In discussing how insurance can manage environmental risks, the author states that insurance enables a risk-averse party to transfer its risks to a third party (the insurer) for a relatively small fee so that the third party would absorb its potentially catastrophic financial liability. The insurer, by absorbing the risk of the risk-averse party, sets premiums and coverage conditions which induce responsible environmental behavior.

As to whether environmental insurance should be compulsory for enterprises engaged in liability generating activities, the author argues in favor of compulsory insurance provided moral hazards can be controlled and there is the threat of insolvency. The article significantly

contributes to the literature on environmental insurance by suggesting that problems of long term environmental risk and insurability of ecological damage could be resolved through the development of secondary markets for risk trading and the waiver of insurability for ecological damage.

Tienhaara, Kyla, "Foreign Investment Contracts in the Oil & Gas Sector: A Survey of Environmentally Relevant Clauses" (2011) 11:3 Sustainable Development Law & Policy 15.

In this article, the author sampled forty-one (41) upstream oil and gas contracts covering thirty-five (35) countries entered into from 1994 – 2008 and critically examined the extent to which environmental issues were addressed in those contracts. Ghana's Model Petroleum Agreement was one of those contracts critically examined by the author. Critically examining the contracts, the author found that environmental standard clauses in most of the contracts sampled (especially in resource rich developing countries) vaguely referred to domestic environmental law when the environmental regulations of the oil and gas sector were still in their infancy or international industry standards when there was ambiguity as to what constituted best international industry standard. Gas flaring clauses were also a regular feature of the contracts but despite the clause substantial amounts of gas were being flared in developing countries because of limited infrastructure and weak regulatory institutions. Although, the article discusses the liability clauses identified in the sampled oil and gas contracts, the article does not discuss whether the contracts contained insurance clauses. Overall, the author thinks that there is an increased awareness of the environmental issues in the oil and gas sector and an improvement of the findings of Zhiguo Gao, *International Petroleum Contracts: Current Trends and New Directions*

(London: Graham & Trotman, 1994) that the environment did not receive enough attention in the oil contracts.

Vlavianos, Nickie, “Creating Liability Regimes for the Clean-up of Environmental Damage: The Literature” (1999) 9 J Envtl & Pol’y 145.

The article is a critique of the policy of the Alberta Energy Appeal Board (EAB)’s policy of holding the last licensee of an oil well or a contaminated site liable for the cost of conservation and reclamation irrespective of the activities of prior licensees. Reviewing the liability regime for clean-up of environmental damage, the author criticizes the policy of the EAB as being based only on the status of the last licensee and not in accordance with the environmental liability principles of “polluter pays” and “beneficiary pays”. The author does not only extensively discuss the liability regimes for environmental damage but also suggest that the definition of the “polluter pays” principle must be preceded by a consideration of the rationale of the principle.

Yin, Haitao, Plaff, Alex & Kunreuther, Howard, “Can Environmental Insurance Succeed Where Other Strategies Fail? The Case of Underground Storage Tanks” (2011) 31:1 Risk Analysis 12.

Unless compelled, an industry would not internalize the environmental, health and safety risks of its operations. Regulators have often attempted to use *ex post* fines (fines for discovered violations) and *ex ante* management processes to compel environmental risks internalization. However, these methods have not always been successful. The authors therefore set out to find out whether insurance, as an alternative environmental policy can yield more prevention when other regulatory methods are dysfunctional. The authors conclude that since insurance

(especially mandatory insurance) has the potential to solve the problem of environmental monitoring and the insolvency of the polluter, insurance is a viable environmental policy alternative. The authors use the Underground Storage Tanks insurance regime to illustrate their finding. Nonetheless, the authors think that *ex post* fine and *ex ante* processes should compliment an environmental insurance regime. The reasons the authors attribute to the failure of other regulatory methods are worth exploring in my thesis.

WEBSITE

Wang, Hui, & Faure, Michael, G, *Civil Liability and Compensation for Marine Pollution- Lessons to be Learned for the Offshore Oil Spills (October 2010)*, online: online: SSRN <<http://papers.ssrn.com/abstract=1975802>>.

The authors are Law Professors in Peking and Maastricht Universities respectively. In this article the authors critically compare the civil liability and compensation regime of marine pollution from vessel-source with marine pollution from offshore facility-source. The authors state that there is no international convention dealing with civil liability and compensation of marine pollution emanating from offshore facilities and that the well established liability and compensation regime of vessel-source marine pollution should inform a possible offshore facility-source marine pollution liability regime. The authors caution that financial responsibility requirements (compulsory insurance) and financial liability caps of the international vessel-source regime should only be introduced into the offshore facility-source regime having regard to the goal of the new liability regime. The article is relevant to my thesis because of the critical evaluation of the compulsory insurance aspects of the international regime for vessel-source marine pollution.

INTERPRETATION AND APPLICATION OF FORCE MAJEURE PROVISIONS IN OIL AND GAS CONTRACTS IN COLOMBIA

ANNOTATED BIBLIOGRAPHY

(In progress)

Luz Ximena España Amador

LL.M Candidate, University of Calgary

December 2012

This annotated bibliography has been produced for LAWS 703 at the University of Calgary. It contains literature relevant to my LL.M major research project. Because this research is ongoing, the literature noted here does not represent an exhaustive list, but rather is a current snapshot of progress made.

The topic I am concerned with is oil and gas contracts in Colombia. This is because Colombia has engaged in the exploitation of hydrocarbons for the last three decades, and so the industry is both developed and yet nascent in certain regulatory and contractual areas. Currently, several foreign and national companies are developing oil and gas operations in the country. Despite this hydrocarbon boom, armed conflict amongst illegal internal groups has cast a long shadow over the development of the industry. Colombian guerrillas have committed terrorist acts, including blowing up infrastructure, blocking roads, kidnapping, extortion, and murder.

Political violence greatly affects the development of oil and gas operations in Colombia. Accordingly, my research analyzes *force majeure* clauses in Colombian oil and gas contracts. My research question asks whether violent interruption by illegal third-party armed groups of contracted oil and gas operations in Colombia constitute force majeure?

Given this subject, and the locus of the contracts under consideration, Colombian law is obviously applicable, and specifically the *Código de Petróleos* (Petroleum Code). Consequently, Colombian doctrine will be used to address the research question.

I. Legislation

Código Civil Colombiano, Ley 57 de 1887, 1887, online:
<http://www.secretariassenado.gov.co/senado/basedoc/codigo/codigo_civil.html>.

Código de Comercio de Colombia, Decreto 410 de 1971, 27 March 1971, online:
<http://www.secretariassenado.gov.co/senado/basedoc/codigo/codigo_comercio.html>.

Código de Petróleos de Colombia, Decreto 1056 de abril de 1953, April 1953, online:
<<http://www.dnp.gov.co/LinkClick.aspx?fileticket=v4Sp4cMagNU%3D&tabid=322>>.

Constitución Política de Colombia, de 5 de Julio de 1991, G.C., 5 July 1991, online:
<http://www.secretariassenado.gov.co/senado/basedoc/cp/constitucion_politica_1991.html>.

II. Secondary Materials: Monographs

Bonivento Fernandez, Jose Alejandro. *Los Principales Contratos Civiles Y Comerciales* 7th ed (Bogotá: Librería Ediciones del Profesional Ltd, 2012).

As a former president of the Supreme Court and Magister of the Council of State, Bonivento is recognized as a formidable jurist. He has been professor of Civil and Commercial Contracts for over 40 years at the National University of Colombia. His publications on private law, particularly contract law, are frequently cited. His book referenced above is useful to my research because it explains the major types of contracts in Colombia. It also describes the general provisions that contracts should contain as well as the principles that govern contracts. This is important because the author provides both practical and theoretical insight into different types of contracts. This book is clearly written, and is used often by both legal and non-legal professionals in Colombia.

Brunner, Christoph. *Force Majeure and Hardship under General Contract Principles* (Netherlands: Kluwer Law International BV, 2009).

Given the international nature of many oil and gas contracts, this work's interpretation of the principles that govern international contracts is quite useful. The author's work also

contains an explanation of force majeure and its elements. Because of its international foundation, the book contains civil law concepts as well. These will help complement the Colombian literature.

Cordero-Moss, Giuditta. *Boilerplate Clauses, International Commercial Contracts and the Applicable Law* (Cambridge: Cambridge University Press, 2011).

Cordero is a recognized lawyer and law professor at the University of Oslo. She is a member of the Institute of Private Law, where she focuses on international commercial law, and specifically international contracts, international litigation, and business projects in Russia. Along with the Colombian literature and the Colombian Civil Code, this book will help provide a better understanding of the law that is relevant to the sort of contracts contemplated in my paper. It is also helpful for the analysis of contractual drafting styles. Despite the fact that clause-style is a common law concern, international contracts are adopting this approach. While Colombian law governs domestic contracts, difficulties that may arise when contracts are international in nature, and thus often drafted in the common law style. Given that some of the current oil and gas contracts in Colombia are multi-jurisdictional in scope, it is important to examine to what extent said contracts consider Colombian law. Cordero in particular analyses the implications that the style of contract may have when choosing the governing law. This will help analyze the tension that may arise when a contract is written in the common law style, but where the governing law is civil. This book was created for an academic audience.

Cortés Moncayo, Edgar Alberto. *La culpa contractual en el sistema jurídico latinoamericano* (Bogotá: Universidad Externado de Colombia, 2009).

Cortés is a respected professor at the Universidad Externado de Colombia. He has co-authored several publications with Fernando Hinestrosa (*infra*). Like Hinestrosa, Cortés is a respected lawyer in Colombia and Europe, particularly in Italy from where he holds a Masters and PhD in Law. At Externado, he is an active member of the civil law department and teaches both J.D. and LL.M. students. Cortés' book focuses on contractual liability, and it analyses the most up to date advances in the field using a comparative perspective, which underscores its importance for my research. Cortés is a top-tier academic and his books are intended for law students.

Hinestrosa Forero, Fernando. *Tratado de las obligaciones: concepto, estructura y vicisitudes* 7th ed (Bogotá: Universidad Externado de Colombia, 2007).

Hinestrosa is one of the most recognized legal scholars in Colombia and in civil law jurisdictions generally. He was Minister of Justice of Colombia, Magister of the Supreme Court of Colombia, member of the Permanent Court of Arbitration at the Hague, and Dean of the Universidad Externado de Colombia until his passing in 2011.

In the referenced work, he explains force majeure/*cas fortuity*, and states the different elements that integrate these concepts. Further, he explains the possible factors that may constitute exceptions to force majeure and *cas fortuit*. To support his arguments, he uses the Colombian Civil Code as well as jurisprudence from the major courts. Hinestrosa provides examples for all of the different elements that he addresses.

As well, the author integrates international doctrine from, for example, Italy and Germany. This book is directed at a legally competent audience in light of its complex language and terminology. This book compels the reader to think carefully about a fundamental element in legal practice, studying the possible relations that may arise within the law of obligations.

Koteich Khatib, Milagros Buchrria. *Estudios de derecho civil, obligaciones y contratos: libro homenaje a Fernando Hinestrosa 40 años de rectoría 1963-2003* (Bogotá: Universidad Externado de Colombia, 2003).

Koteich is a Venezuelan scholar recognized for her expertise in civil liability and Roman law. The author has a PhD from Scuola Superiore Sant'anna, and a Masters Degree from Università Degli Studi Di Roma Tor Vergata. Owing to her education in Italy, the author brings Roman civil theory and principles to contractual analysis. This is important for my research because of the importation of the *Code Civil des Français*—the Napoleonic Civil Code of 1804—to Andrés Bello's Chilean Code and subsequent importation into Colombia. As such, Colombia's legal system is *iuri civile*, which comes from the Roman tradition. In this book, the author's analysis on contractual liability and the gradation of fault—*lata culpa*, *levis culpa*, and *levissima culpa*—will be a crucial element in determining whether force majeure in the manner described can be imported into oil and gas contracts. Koteich's intended audience is civil law lawyers/scholars.

Moreno, Luis Ferney. *Temas de Derecho Petrolero* (Bogotá: Universidad Externado de Colombia, 2011).

Moreno is a professor at the Universidad Externado de Colombia in the Mining and Energy Law Department. The author holds a PhD from Université Catholique De Louvain, and is a recognized professional and academic. Moreno compiles different articles that are relevant to the legal framework of the oil and gas industry in Colombia. This is useful for my work because it explains the existing risks and costs in oil and gas contracts in Colombia. Furthermore, the author explains the legal impact of the arrival of international mining and oil and gas companies to Colombia. The book utilizes specialized language, rendering it useful for those with an existing knowledge of oil and gas, or for students pursuing specialization in the subject matter.

O'Callaghan Muñoz, Xavier. *Cumplimiento e incumplimiento del contrato* (Madrid Editorial Centro de Estudios Ramón Areces: Consejo General del Notariado, 2012).

Ospina Fernández, Guillermo. *Teoría general del contrato y del negocio jurídico* 7th ed (Bogotá: Universidad Externado de Colombia, 2007).

Viney, Geneviève & Fernando Montoya Mateus (Trad). *Tratado De Derecho Civil: Introducción a La Responsabilidad* (Bogotá: Temis, 2007).

Viney is professor emeritus at the Université de Paris I, Panthéon-Sorbonne. She is renowned for her contributions to the analysis of contracts and the determination of liability. Fernando Montoya is a legal advisor specializing in civil, commercial, and foreign investment law. Montoya is also contracts and torts professor at the Universidad Externado de Colombia. He holds a Masters Degree from Paris II, (Pantheon-Assas). The text will assist me through its discussion of civil responsibility through a comparative law lens. Also discussed are the civil and criminal law effects of a breach of contract for different reasons, including force majeure. This book clearly introduces readers to contractual responsibility and the current debates taking place that in this area. This book is directed to an audience with some legal knowledge.

III. Secondary Materials: Articles

Chamie, José Félix. “El principio general de reductio ad aequitatem por desequilibrio contractual” (2012) 22 Revista de Derecho Privado Universidad Externado de Colombia 219, online:
<<http://revistas.uexternado.edu.co/index.php/derpri/article/view/3195/2832>>.

Firoozmand, Mahmoud Reza. "Force Majeure Clause in Long-Term Petroleum Contracts: Key Issues in Drafting" (2006) 24 *Journal of Energy & Natural Resources Law* 423.

Firoozmand discussed the importance of including force majeure clauses in long-term petroleum contracts. This is because said clauses are arguably the best way to deal with unforeseen events, rather than going to court or arbitration. The author considers different contingencies that may arise depending on the countries involved during the development of international oil contracts. It also analyses the implications of the inclusion of a detailed list of events within the force majeure clause versus a general clause. Further, it approximates the legal effects that may flow from using of a force majeure clause. This article will provide the general scope of force majeure as it concerns my research.

Hagen, Jason. "Uribe's People: Civilians and the Colombian Conflict" (2003) 4 *Geo. J. Int'l* 65.

Uribe is the former president of Colombia, whose administration was characterized as right-wing. He fought against illegal armed groups with strong policies. The article provides a historical analysis of how the armed conflict within Colombia has mutated in recent decades. It discusses the main components of the security policy implemented by Uribe in order to end war with the guerillas. However, despite these efforts, Colombia remains afflicted with violence. This article provides a background of the elements that currently propel the internal conflict. This analysis is important for my research as one of the main elements of force majeure is that whatever event that triggers it is unforeseeable. Therefore, when a company carries out contracts in Colombian territory, it is aware of the existing violence. So, it might be argued that an attack by an illegal armed group is not unforeseeable.

Katsivela, Mare. "Contracts: Force Majeure Concept or Force Majeure" (2007) 12 *Unif L Rev* 101.

Kelley, Jay D. "So What's Your Excuse—An Analysis of Force Majeure Claims" (2007) 2 *Texas Journal of Oil, Gas and Energy Law* 91.

Konarski, Hubert. "Force Majeure and Hardship Clauses in International Contractual Practice" (2003) 2003 *IBLJ* 405.

López Enrique et al. “La Economía Petrolera en Colombia” (2012) Borradores de Economía, online: Banco de la Republica
<http://www.banrep.gov.co/publicaciones/Copia%20de%20pub_borra.htm>.

This article, issued by the Bank of the Republic, explains the oil economy of Colombia from a legal and contractual point of view. This document surveys government intervention in the oil and gas economy, meaning taxes and royalties. The article is very clear and provides the most up to date information for my research.

Oviedo Albán, Jorge. “Negociación y documentos preliminares en la contratación internacional” 22 Revista de Derecho Privado Universidad Externado de Colombia 73 online: <<http://revistas.uexternado.edu.co/index.php/derpri/article/view/3190/2827>>.

Theroux, Michael. “Force Majeure in Canadian Law” 49 Alta L Rev 397.

Wright, William Cary. “Force Majeure Delays” 26 Construction Law 33.

IV. Secondary Materials: Magazines & Newspapers

“Ataques de Farc y Eln afectaron sectores de hidrocarburos y transporte” El Tiempo (4 July 2012) online: <<http://www.eltiempo.com>>.

“¡BOOM! La guerra por el petróleo” Revista Dinero (2 August 2012) online: <<http://www.dinero.com>>.

“Kidnapped Colombian oil workers freed as army moves in”, BBC News (8 March 2011) online: BBC News <<http://news.bbc.co.uk>>.

“Vichada: Siguen operativos para rescatar al último de los contratistas plagiados”, Revista Semana (7 March 2011) online: Semana.com <<http://www.semana.com/nacion/vichada-siguen-operativos-para-rescatar-ultimo-contratistas-plagiados/152967-3.aspx>>.

V. Other Materials

Santos, Juan Manuel. “Plan Nacional de Desarrollo - Prosperidad para todos” (2011) [Unpublished, archived at Departamento Nacional de Planeación Bogotá Colombia] online: <<http://www.dnp.gov.co/PND/PND20102014.aspx>>.

The current President of Colombia, Juan Manuel Santos, and his team issued a document with the goals and proposals for his presidency period. This document is directed at the

public, and is divided into areas of interest for Colombia. The relevance of this for my research rests on the proposed economic scope given to the energy industry in Colombia. The chapter referenced above demonstrates the priority Santos places on this industry, anticipated changes to the market, and his goals for the *Locomotora de la Minería y Energía* (Mining and Energy Train), as colloquially referred to by the President.

REGULATING THE QUANTITY AND QUALITY OF WATER USED IN BIOFUEL PROJECT: WHAT CAN NIGERIA LEARN FROM ALBERTA?

AYODEJI N OTITI

ANNOTATED BIBLIOGRAPHY

I am conducting a legal research on the inherent water-use impact of the Nigeria's burgeoning biofuel project. The project has many laudable benefits. However, its serious, disproportionate requirement for water for each liter of produced-biofuel may prove catastrophic for the nation's water supply. Hence, the suggestion that Nigeria should adopt Alberta's water management law. Below is the annotated bibliography of some of the textual sources consulted.

[1] Elijah I Ohimain, "Emerging Bio-ethanol Projects in Nigeria: Their Opportunities and Challenges" (2010) 38 Energy Policy 1761.

Thiamin's audience can be described as a cross-section of people comprising the energy policy analysts, academics, scholars, students, administrators, politicians and biofuel enthusiasts. He claims that Nigeria's biofuels use and production was forced by the need to meet its domestic need for fuel. With the use of an extensive alphanumeric data he posits that, Nigeria is making tremendous progress in its attempt to achieve sufficiency regarding domestically sourced biofuel. Yet , there are problems: insufficient supply to meet an already large and widening demand, food-for-fuel crisis and alarming food price increase, poor infrastructural facilities and the die-hard traditional farming system, which currently compromises crop-yield for both food and crops used as raw materials for biofuels.

Ohimain's paper is very instructive. It provides me with useful information on the current strength of the Nigeria's biofuel project relative to the time it started. My research will

particularly benefit from its alphanumeric data, showing the regional location of biofuel plants and the type of food-crop raw materials (feedstock's) used. However, he is weak on identifying common and hidden problems of the biofuels. For example, land-grabbing issue, mono-cultural problem and (as Rosamond L Naylor *et al* have pointed out) the use of fertilizer, which is inherently polluting – it releases nitrogen oxide problem that eventually damages soil fertility.

[2] Rosamond L Naylor et al, “The Ripple Effect: Biofuels, Food Security, and the Environment” (2007) 49: 9 *Environment: Science and Policy for Sustainable Development* 30.

The authors posit that the rapid global development in biofuels has brought about the intersection of agriculture with energy, consequently, the hope for the 2015 Millennium Development Goal (MDG), which is to alleviate the global hunger and poverty, is not bright. With the use of both alphanumeric, as did Thiamin (above), bar and flow charts and slides data, the authors argue that production of biofuels has succeeded in taking food off the tables of the global poor, and also increasing their poverty, because almost eighty percent of their meager income is now spent on chasing the rapidly rising food prices. Environmental pollution, national and geopolitical bickering are another bad sides of global chase after biofuels. The authors' audience is likely to be those in policy crafting, environment-related disciplines, scholars, global think thank, students, legislators and academics.

The authors did a great job in providing wide, global-regions-informed pros and cons of biofuels growth and development. Their comment on what various national governments are doing to reduce food-for-fuel export (*e.g.* Indonesian government taxing palm fruit export to discourage

its citizens from exporting palm-crop to Europe) and prevent food scarcity is also instructively noteworthy.

I found the periodical very useful. It enriches and enhances my knowledge on biofuels. It also provides me an interesting global and geopolitical picture of biofuels and its hidden tax-related, fiscal and policy context.

Yet, the work sounds overly alarmist. In addition, while the authors carefully highlight the biofuel-induced food scarcity, they fail to acknowledge the fact that food shortage in many of the developing countries they mention has more to do with the inherent issue of poor governance than production of biofuels.

[3] E O Longe et al, “Water resources, use, abuse and regulations in Nigeria” (2010) 12: 2 Journal of Sustainable Development in Africa 1.

These authors claim that scarce resources by their nature demand for law and regulations, to guide and manage their exploitation and ownership. Yet, water resources in Nigeria, unlike many other global well- organized societies, suffer from bodies of laws, regulations and policies and the result is abuse and scarcity of potable water. They argue that effective legislation for Nigeria’s water resources is lacking because government lacks the proper and effective information to plan. In addition, they claim that many water resources related laws are reactive and not proactive regarding their enactment. For example, they claim that it was the famine incident across Africa in the 70s that spurred the then government of Nigeria to think about water management law.

Using a somewhat doctrinal methodological approach, the authors use of water laws (spread over many years) and related legislations to generally highlight how Nigeria's water laws are still failing in respect of what their public mandate is.

The targeted audience of these authors can be described as largely Afrocentric – particularly individuals like me that are scholarly interested in Nigeria-related water issues. However, the possibility is there for the global academics, scholars, and those in water-related disciplines, particularly across Africa, to be interested in the treatment of water issues in the journal.

The articles is very helpful in my burgeoning research. It provides me with useful information on the state of water management law in Nigeria. Its discussion of environment related regulatory agencies in Nigeria is also noteworthy.

The downside of the authors' work for me is that it does not directly address my topic – water-use impact of biofuel production in Nigeria. Moreover, one would have expected the authors to theorize more on regulations, which they use to introduce their discussion. In addition, the authors' knowledge on constitutional framework of Nigeria seems to be weak, because they present their work to read as if only the Nigerian federal government is constitutionally charged with water resources management; hence, the state or provincial governments seem to have been unintentionally or deliberately exculpated for their failing water management legal and regulatory systems.

[4] Sonia Yeh et al, “Evaluation of Water Use for Bioenergy at different Scales” (2011) 5: 4 Biofpr 361.

This article is a collaborative intellectual work of a group of interdisciplinary scholars and practitioners. The authors’ argument is that water displacement analysis on bioenergy production is overblown. The gist of their position is that the quantification of influence of bioenergy (*e.g.* biofuel) on water is not straight forward, because such quantification is complicated by many issues and features: source of bioenergy, complexities of physical, chemical and biological conversion processes, feedstock diversities and variability in site specific conditions. Consequently, it is difficult to draw a general understanding of the impact of bioenergy on water from the existing literature.

Using case study methodology, the authors investigated the water-use impact on sugarcane (Brazil), Corn (the USA), and Jatropha (India). Subsequently, with the result of their study, they assert that water management and “co-product” use of water (*e.g.* using bad water, or purifying it) can reduce the water-use impact of bioenergy production.

The article is rich in information, particularly the empirical case study conducted. The article will be very helpful to my research. It shows that water-use impact of bioenergy may not be problem of great magnitude in so far as it is effectively regulated. This of course somewhat supports my call for Nigeria to adopt Alberta’s water management regime.

The authors audience can be described as scholars, biofuels analysts, policy makers, academics, students and those in government and interested in biofuels issues generally, but particularly on water-use impact area of biofuels production.

While the article can be said to justify its claim, it fails to include the influence or contribution of good, effective law, regulations and policies into those variables that can help reduce water-use

impact of bioenergy. Besides, they do not mention about soil and water pollution of bioenergy production as Naylor et al have discussed in their own paper.

[5] Kenneth Mulder, Nathan Hagens & Brendan Fisher, “Burning Water: A Comparative Analysis of the Energy Return on Water Investment” (2010) 39: 1 *AMBIO: Journal of Human Environment* 30.

Using a formula tagged EROI (energy return on energy investment) the authors set about to discover the role of water in energy production. They claim that the use of this formula show that the fossil-based energy production uses less water than the biofuels. Moreover, it is also their claim that the use of biofuels as replacement for fossilized fuels, particularly their use as a mitigating tool for greenhouse gas (GHG) emissions may not be living up to expectation. They further argue that ripple effects of biofuels will include water withdrawals, habitat destruction and a bad effect on fresh water availability.

The authors’ work improves my knowledge on other aspects of bioenergy water-use impact, particularly regarding fossilized fuels (e.g. crude oil). It also confirms the findings of scholars like Naylor et al and Raymond Suppala on the water-use impact of biofuel production.

While the work of the authors is commendable in giving a new perspective into the water-use impact in bioenergy production, it is, however, stating the obvious by its finding that, fossilized fuel production consumes less water than biofuels. Besides, their categorical claim that biofuels water-use impact is disconcerting is difficult to reconcile with the empirical findings of Sonia Yeh and her other eight co-author’s (discussed above), which show that water-use impact of biofuels across many fields of feedstocks can be effectively managed. Furthermore, they did not mention the goodness of biofuels as Ohimain did highlight in his work.

[6] Raymond J Supalla, “Biofuels: An Emerging Hazard for Water Resources” (paper delivered at Southern Illinois University, Carbondale, USA, held on Tuesday, 24 July 2007), online: <<http://digitalcommons.unl.edu/ageconworkpap>>.

Raymond claims that biofuels, particularly bioethanol, have emerged as the most recent threat to sustainable water resources management. He further asserts that water-use impact of bioethanol production is in three phases: irrigation for the feedstocks, water for mid-stream process and water for the downstream process. In addition, he explains that the gravity of water-use impact of bioethanol production will depend on how low or high the demand is for bioethanol. For example, the greater the demand for bioethanol, the higher is the demand for irrigation and the worse regarding the problem of water-use impact of bioethanol. Besides, phosphorus pollution of the soil and water, from the cow manure, can also result from producing corn substitute as a by-product of bioethanol. He calls for a quick review of policies on bioethanol in order to avert water crisis. So, one may safely conclude that his targeted audience includes agricultural and biofuels policy planners, legislators and officers of government.

The author’s work can be described as being similar to research in progress. The article is, therefore, useful as a source for an insight into those areas I am yet to gain knowledge in. Furthermore, his call for policies to mitigate the water-use impact is akin to my own call for Nigeria to embrace Alberta’s water law regarding its biofuel project.

Raymond’s work is a noteworthy contribution to discussing the current problems regarding biofuels production. However, his work fails to note that the problems he focuses on are inherently typical of first generation biofuels feedstocks. Whereas, second and third generation of biofuels, discussed by Pamela et al, may not be as water-needy as the wholly plant-based

biofuels production he is writing about. Besides, the work of Sonia Yeh et al makes his work less well informed, since it proves that water-use impact problems of biofuels are not as dire as Raymond portrays them.

[7] Pamela R D et al, “ Environmental and Sustainability Factors Associated with Next-Generation Biofuels in the US: What Do We Know?” (2009) 13 Vol 43 Environmental Science & Technology 4763.

The authors are calling for acceleration of research on the next generations of liquid biofuels – cellulosic materials (microalgae, forest-residues, switch grass and dedicated energy crops) and municipal solid waste – to prevent the long term, negative environmental consequences. They claim that the environmental implications of the use of first generation biofuels – basically food crop or plant-based – increase in GHG, air pollutants with emissions, soil health and quality, waste-water and solid waste contamination of water, destruction of biodiversity, land use change and carbon debt.

With the use of excellent alphanumeric data, bar charts, and pie charts, the authors systematically identify and discuss the problems that are inherently and typically associated with first generation biofuels production.

While the focus of the problems the authors are discussing is the United States, the problems are ubiquitous to everywhere biofuels production is taking place. It is noteworthy that phosphorus-related pollution, they point out, has led to *hypoxic* zone area in the Gulf of Mexico, where neither fish nor any living things can survive on account of absence of oxygen. The authors claim that it was the irresponsible historical agricultural practice in the Mississippi basin (USA) that created the zone.

The article is very informative. It treats the theme on biofuels critically and methodically. It offers me a glimpse of how biofuels production has become a centre stage issue in the politics of the United States. The why, how, who, and for what the United States is engaged in the first generation biofuels for? Are a part of its instructive benefits to my research. For example, the corn politics in the USA is so divisive that both federal and state governments of the state avoid dealing with it. Hence, first generation biofuels may stay longer as feedstocks for biofuels. While the article is well written, it fails to include the fact that water-use impact of biofuels production may not be as bad as it is portrayed, as Sonia Yeh et al as discussed in their paper. .

[8] Olusegun D Samuel & S O Adekomaya, “Challenges Confronting Sustainability of Biodiesel in Nigeria” (2012) 1, vol 1 ASSET 41.

Claiming that Nigeria’s involvement with biofuels is predicated on the need to reduce global warming, reduce poverty and initiate economic diversification, the authors argue that the government of Nigeria should accelerate the actualization of its lofty dream regarding biofuel project. They identify the following as challenges of biofuels: lack of infrastructure, absence of technical skills, fears of food-to-fuel and insufficiency of capital.

The methodology employed by the authors is a review of literature with historical analysis. The article is simply written and methodically treated its sub-themes. It is very useful for my project because of its historical insight into the emergence of biofuels use and production in Nigeria. It also offers me an insight into a few of the peculiar problems confronting Nigeria’s biofuel project, for example, absence of technical skills and capital to develop biofuels project quickly, faster and further.

The only shortcoming of the article is that its discussion of the challenges of biofuels in Nigeria is not comprehensive enough. It does mention water-use impact problems, corruption and possible constitutional impediments.

[9] Temilade Sesan, “Status of Renewable Energy Policy and Implementation in Nigeria”, online: (2008) Institute for Science and Society, Faculty of Social Sciences, Law and Education, University of Nottingham, United Kingdom
<<http://www.gbengasesan.com/temidocs.REPStatusNigeria.pdf>>.

Temilade claims that the energy policy of Nigeria is not current, and it cannot be relied upon to deliver as it is expected. He acknowledges the fact that the government of Nigeria did not realize how important it is to place renewable energy theme within what he calls the “big picture” – the energy sector. Yet, the elements within the energy sector have not been properly managed to meet the nation’s energy needs. Within a number of sub-themes including, optimum development of Nigeria’s energy sources, diversification, national energy security, and development of human and institutional capacity he discussed a number of sources of renewable energy, such as solar power, solar thermal, wind, hydro power and biomass. He also identifies the challenges plaguing renewable energy sector in Nigeria as policy and regulation, finance, availability of market , technological, institutional and socio-cultural.

The paper is good because it gives an overview on the renewable energy sector in Nigeria. Though this is a general and non-specific issue regarding individual renewable energy issue, the discussion of problems confronting the renewable energy sector cut across each and everyone of the sub-renewable sector, which includes biofuels.

The article offers me an insight into the renewable energy problems in Nigeria. It, therefore, reinforces the idea that Nigeria needs to re-jig its renewable energy sector, particularly biofuels. The article is very general in nature, hence, its usefulness is not as full as I want it. Moreover, it does not speak to my biofuels-related project.

[10] Oparaku N F, "Alcohol Fuel from Biomass: Challenges of Implementation in Nigeria" (2010) 3 Continental J Biological Sciences 1.

The author's complaint is that in spite of the overwhelming blessing in both human and natural resources that Nigeria has, it is not living up to expectation regarding their exploitation and proper management. He argues that Nigeria has no excuse for its failure to harness plants such as corn, soybeans, molasses and others for the purpose of transportation fuels. He further asserts that the development of and conversion into energy sources of such agricultural produce will help Nigeria in attaining the use of clean, non-fossil energy, electricity generation, industrial development and bumper harvest that will generally help the nation's economy. However, the attainment of such lofty goals is seriously hampered by low public awareness, absence or poor research and development sector and lack of financial support or investment.

Oparaku's article offers a nuanced perspective into the common problems of renewable energy in Nigeria. He does not offer something new to my project. He also generalizes his treatment of biofuels, and he hardly sees water-use impact as a challenge to the biomass-based energy development.

[11] Nelson Manuel Ojukwu-Ogba & Amos Osaigbovo Enabulele, “The Legal Protection of Groundwater resources in Nigeria” (2009) 3 Malawi L J 273 [HeinOnline].

The claim of the two authors is that water law in Nigeria does not offer protection to ground water. They are particular about the fact that neither a comprehensive nor a specific statute in Nigeria addresses the ground water pollution. Furthermore, they explain that the ground water pollution is worse than the surface water in that the former is “non-regenerative” – its ability to be easily diluted and got rid of its pollutants is near zero. Besides, they assert that ground pollution is very bad because it takes time to discover and the damage is done before the pollution is known. Explaining that ground water is as important as the surface water in Nigeria, since more than half of the Nigerian population is dependent on it for a variety of domestic and industrial uses, it is, therefore, necessary and urgent for the tri-cameral level government in Nigeria to create a proactive and effective ground water legal and regulatory regime before it is too late.

Ojukwu-Ogba and Enabulele were very strong in providing data with respect to the quantity of underground water available to Nigerians, as well as other general statistical data regarding water. Their article offers me a new insight regarding other areas that my project needs to focus in term of the need for effective legal and regulatory water regime. More so, since the water-use impact of biofuels production is not limited to the surface water alone, but also affects all available sources of water.

The weakness of the paper includes the fact that it does not directly address the theme of my paper. Besides, the states of the Nigerian federation are hardly mentioned regarding their

responsibilities, since the ground water is jurisdictionally diffuse in nature as their sphere of influence.

[12] Ajiboye A J, Olaniyi A O & Adegbite B A, “A Review of the Challenges of Sustainable Water Resources Management in Nigeria” (2012) Int’l J Lifesc Bt & Pharm Res 1.

Messrs. Ajiboye, Olaniyi and Adegbite assert that the current water law in Nigeria is poor in its “provisions and mechanisms” for inter-sectorial co-ordination, tariff setting and conflict resolution. They further posit that the factors that may be responsible for the foregoing challenges of the water law in Nigeria include weak database, fragmented responsibility, weak institutional framework, customary law and framework allocation. Moreover, they also claim that the current challenges of sustainable water resources management involve the inability of the government to conceive “simpl[e] policy relevant questions”, such as, how much of the resource is available? Who needs it? Who gets it? And at what price, if any? Who decides who gets what? And by what procedures? Their suggestions to eradicate or mitigate these problems include, a review of the current law and inclusion of inter-sectorial provisions to enrich policy considerations and formulation.

The authors recognize the inter-sectorial problem of the water management problem in Nigeria. The issue of corruption is also highlighted. The article is useful and it expands my knowledge on the many challenges plaguing the water-management system in Nigeria. I feel that the authors are in support of my call for a rejig of the Nigeria’s water law. However, they do not seem to think that an external help (as I will be suggesting to adopt Alberta’s water law to run Nigeria’s water resources law), is necessary to attain an effective water management regime in Nigeria.

ENVIRONMENTAL REGULATION OF OFFSHORE PETROLEUM ACTIVITIES: AN ASSESSMENT OF THE GHANAIAN LEGAL FRAMEWORK.

ANNOTATED BIBLIOGRAPHY

COMPILED BY

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INTRODUCTION

This annotated bibliography was prepared for the Legal Research and Methodology Class (LAW 703). It is a selection of information from secondary sources that are relevant to my thesis research. The main thrust of this thesis is an assessment of the Ghanaian legal framework for the environmental regulation of offshore petroleum activities. The question under consideration is what legal and regulatory actions Ghana should undertake to effectively regulate the environmental impact of the activities of the offshore industry. Comparative methodology is used to compare and contrast the Ghanaian regime to the Norwegian regime. This annotated bibliography is a work in progress and should not be seen as an exhaustive and conclusive list of sources relevant to my thesis research.

SECONDARY SOURCES: BOOKS

Dagg, Jennifer et al. *Comparing the Offshore Drilling Regulatory Regimes of the Canadian Arctic, the U.S., the U.K., Greenland and Norway* (Alberta: Pembina Institute for Appropriate Development, 2011)

In this work the authors utilize comparative methodology to compare and contrast the legal regimes governing the offshore industry of five regimes including Norway. They provide a detailed analysis of the various legislations and regulations operating in each regime and highlight their strengths and shortcomings. The lead author, Jennifer Dagg, is a policy analyst at the Pembina Institute with extensive research and project experience in renewable energy and climate change options. The co-authors have varying experience ranging from conducting projects for Environment Canada to environmental externalities in the oil and gas sector. Policy makers are the targeted audience for this work. It helps my research by providing analysis on the various legislations and regulations currently in force in the Norwegian offshore regime.

Holder J., *Environmental Assessment: The Regulation of Decision-Making*. (Oxford: Oxford University Press, 2004)

In this piece the author elucidates key parts of the environmental assessment process and discusses its evolution and current use in environmental protection. She focuses specifically on the significance of the Environmental Impact Assessment (EIA) process and proposes an approach to regulation of decision making under the EIA process. Professor Jane Holder is noted for her research work and publication in the field of environmental assessment. She had her PH.D from Warwick University and her thesis was published as this book. This work aids my

research by creating a standard for an effective environmental impact assessment process which will be used to assess the regimes of both Ghana and Norway.

SECONDARY SOURCES: BOOK CHAPTERS

Duncan L.F., “Enforcement and Compliance” in Elaine L. Hughes, Alastair R. Lucas, William A. Tilleman, eds, *Environmental law and Policy*, 2nd ed (Toronto: Edmond Montgomery Publications 1998) 321.

In this chapter the author differentiates between the ideas of compliance and enforcement. She identifies the various components of an effective framework for Enforcement and compliance and posits that efforts aimed at achieving compliance will fail unless the basic components of an effective compliance and enforcement regime are recognized and implemented within a carefully developed strategy and framework. The author is a member of the Marine and Environmental Law Institute at the Schulich School of Law, Dalhousie University. She has over 30years in environmental law and design and delivery of programs and strategies for effective environmental regulation. This article provides useful information on the how an effective compliance and enforcement regime should be constituted and this will be used to generate one of the criteria to be used for my comparison.

Gao, Zhuigo, “Environmental Regulation of Oil and Gas in the Twentieth Century and Beyond: An Introduction and Overview” in Zhuigo Gao ed, *Environmental Regulation of Oil and Gas* (London: Kluwer Law International) 3.

The author undertakes an analysis of early international legal instruments affecting petroleum environmental regulation as well as a discussion of some petroleum environmental regulatory tools. He focuses mainly on new approaches and themes in petroleum environmental regulations and concludes that a dynamic legal framework is needed to meet the ever growing industry. Zhuigo Gao is lecturer in Environmental Law at the Centre for Petroleum and Mineral Law and Policy, University of Dundee. He was the principal drafter of the China's major marine laws and has carried out extensive research and consultancy work in the areas of natural resource and environmental policy. This work is targeted majorly at academia but can prove useful to policy drafters as well. It will contribute immensely to a major point in my research that new themes in petroleum environmental regulation should be explored.

Vinogradov, S. V. & Wagner, J. P., "International Legal Regime for the Protection of the Marine Environment Against Operational Pollution from Offshore Petroleum Activities" in Zhuiguo Gao ed, *Environmental Regulation of Oil and Gas* (London: Kluwer Law International 1998),

The author discusses the various international law treaties and principles that govern offshore petroleum activities. He specifically analyses different environmental effects arising from offshore activities in relation to the appropriate legal regime regulating it. He also discusses international law obligations on states and comes to the conclusion that each state has different international obligations depending on the location of the country. S.V. Vinogradov is a Senior Research Fellow at the Centre for Energy, Petroleum and Mineral Law at the University of Dundee with expertise in international environmental and natural resource law. This work

provides necessary information on international law obligations required of Ghana and Norway to help determine whether such obligations have been met.

SECONDARY SOURCES: ARTICLES

Agyei, George et al, "Oil Industry Activities in Ghana: Community Perceptions and Sustainable Solutions" (2012) 4:5 Research J of Env'tl and Earth Sciences 583.

This article gives a vivid description of the location of the drilling activities in Ghana. It also discusses and analyses the perceptions and expectations of community residents living close to the offshore activities. The authors are professors at the University of Mines and Technology in Ghana and lecture in the Mining and Geomatic Engineering Departments. The lead author holds a PH.D in Technical Sciences and has over thirty journal and conference publications to his credit. This will be beneficial to my thesis in establishing the fact that Ghana's drilling activities are offshore and environmental problems facing the industry.

Harrison, Kathryn, "*Talking with the Donkey: Cooperative Approaches to Environmental Protection*" (1999) 2 Journal of Industrial Ecology 51.

In this piece, the author makes a strong case for the adoption of cooperative approaches in constructing environmental protection regimes stating that the approach is very cost effective, conducive to innovation and able to promote fundamental attitudinal change than the command and control approach. She emphasizes that cooperation in this regard should not be an exclusive

interaction between government and businesses but should incorporate environmentalists as and when the need arises. Kathryn Harrison is a Professor at the Institute for Resources, Environment and Sustainability at the University of British Columbia with several publications to her credit. Her research interests include environmental policy and public policy. This work is targeted at policy makers and academia. It is beneficial to my research in that it supports my argument for a more cooperative approach to be employed in the Ghanaian legal framework.

Hanson, Anne. "Offshore Drilling in the United States and Norway: A Comparison of the Prescriptive and Performance Approaches to Safety and Environmental Regulation" (2011) 23:4 *Geo. Intl Env't'l L Rev* 555.

In this article, the author employs Norway as the standard to measure the effectiveness of the United States (US) approach to offshore environmental regulation. She advocates for a shift to a performance based system as against a prescriptive system. She does a thorough discussion of how Norway has achieved the enviable record of having one of the best regulatory regimes. Anne Hanson is an associate at the US law firm Latham and Watkins LLP with working expertise in oil and gas law. The article written after the British Petroleum oil spill is directed at policy makers and academia. It aids my research by providing detailed analysis of the Norwegian offshore environmental regime.

Freeman, Jody & Farber, Daniel, "Modular Environmental Regulation" (2005) 54:4 *Duke L J* 795.

In this work, the authors make the case for a modular approach to environmental regulation. They argue for a flexible coordination among governmental agencies and private actors. They

also make the case for the improved public participation and the shift to an agreement based type of regulation. They use the case study approach of the CalFed story to emphasize their argument. Jody Freeman is a Professor of Law at Harvard University and founding director of the School's Environmental Law and Policy Program. She has extensive teaching and research experience and served as a consultant to the Bipartisan Commission of the British Petroleum oil spill. Dan Farber is the Sho Sato Professor of Law at the University of Berkeley, California, a co-director of the faculty's Centre for Law, Energy and the Environment and has eighteen books to his credit. This work is directed at policy makers and academia. It supports a key point in my thesis that increased and improve public participation is a key requirement for an effective regulatory regime.

Gunningham, Neil, "Environmental Law, Regulation and Governance: Shifting Architectures" (2009) 21:2 J Envtl L 179.

The author argues that the new trend in environmental regulation is an increased interplay between state, business and civil society. He comes to the conclusion that the effectiveness and efficiency of an environmental regime is highly hinged on the success of such interplay between the parties. Neil Gunningham is a Fulbright Scholar and the foundation director of the Centre for Environmental Law at the Australian National University. He has over fifteen years research experience in the areas of environmental law and has four books to his credit. His work is directed at policy makers and drafters. It supports my research by providing an analysis of the cooperative approach to regulation which is a major point in my thesis.

Holder, J and Lee, M., “Public Participation in Environmental Decision Making” in *Environmental Protection, Law and Policy Text and Materials* 2nd ed. (Cambridge: Cambridge University Press, 2007)

In this chapter, the authors discuss the attractions of public participation and its role as an indicator of a good environmental regime. They argue that the process and substantive rationales for public participation in environmental decision making is indicative of the democratic qualities of the environmental regime and the appropriateness of any decision made under the regime. The Aarhus Convention is extensively analysed and its provisions on public participation requirements are used as a standard for measuring the appropriateness of a state’s framework for public participation in environmental decision making. Jane Holder is a professor of Environmental law at the University College of London and is noted for her research work which focuses particularly on environmental assessment. Maria Lee is also a Professor of Law at University College of London and a member of the Centre for Law and the Environment and Centre for Ethics and Law. Her research interests lies in law and policy of environmental protection. This work aids my research by setting forth the benchmarks of a public participation regime which is one of the criteria I intend to generate in my thesis.

SECONDARY MATERIALS: INTERNET SOURCES

Cephas Egbefome “Oil spills in Ghana and the Kosmos Energy’s snub: Averting the Gulf Coast Disaster” online: JoyOnline <<http://opinion.myjoyonline.com/pages/feature/201104/63635.php>>

In this paper he discusses the oil spill by KOSMOS, one of the partners in Ghana’s Jubilee fields. He highlights the conflict that ensued between the government of Ghana and KOSMOS and also indicates the loopholes in the law in dealing with the issue of environmental liability. The author holds an MSc in Water Science, Policy and Management from the University of Oxford. He is a Senior Research Officer at the Environment, Science and Technology section of the Parliament of Ghana and is part of the team that drafts policies and bills for parliament. It will provide relevant information on how the Ghanaian law fails to tackle this aspect of environmental regulation.

Annotated Bibliography (in progress)

Fernando D. Arteaga
LL.M. Candidate, University of Calgary
December 2012

The following assignment is the Annotated Bibliography; it is a work in progress and, as such, it should not be taken as comprehensive. I am still adding sources to my research as I am reshaping some of the sub-questions.

My paper will argue that the new Alberta Environmental Regulator is likely to become captured by the regulated industry. To prevent this from happening, this paper proposes tripartism as an effective mechanism. The primary research question in this major paper is: Is tripartism an effective way to prevent the regulatory capture of AER?

Should you have any question about this research or would like to share your ideas or comments, I can be contacted at fdarteag@ucalgary.ca

SECONDARY MATERIALS: MONOGRAPHS

Ayres, Ian & John Braithwaite. *Responsive Regulation: Transcending the Deregulation Debate* (New York: Oxford University Press, 1992).

Fraille, Lydia. *Blunting Neoliberalism Tripartism and Economic Reforms in the Developing World* (London: Palgrave Macmillan, 2010).

SECONDARY MATERIALS: CHAPTERS IN BOOKS

Barton, Barry. "The Theoretical Context of Regulation" in Barry Barton, Alastair Lucas, Lila Barrera-Hernandez, and Anita Ronne, eds., *Regulating Energy and Natural Resources* (Oxford: Oxford University Press, 2006) 11.

As the title suggests in this chapter, it is about a theoretical framework of Regulation. Professor Barton in another of his great articles, organized the theory of regulation from different perspectives and schools. This article has been, in fact, the one that has guided me to find other sources. It has definitely established the framework of the responsive regulation theory. Professor Barton holds an LLB (hons) and a LLM. He took a position in the Canadian Institute of Resources of Law. He wrote the Canadian Law of Mining which is still Canada's premier text on the subject. He has worked at the University of Copenhagen, the University of

Ottawa (in Canada), and the International Institute of Energy Law at the University of Leiden in the Netherlands.

———. “Underlying Concepts and Theoretical Issues in Public Participation in Resource Development” in Donald N. Zillman, Alastair R. Lucas & George Pring, eds., *Human Rights in Natural Resources Development: Public Participation in the Sustainable Development of Mining and Energy Resources* (Oxford: Oxford University, 2002) 77.

SECONDARY MATERIALS: ARTICLES

Ayres, Ian and John Braithwaite. “Tripartism: Regulatory Capture and Empowerment” (1991) 16 *Law & Soc Inquiry* at 435.

This journal article proposes responsive regulation as an alternative in dealing with regulatory capture. Tripartism is an important piece in their argument. They suggest that the tripartism model will promote cooperation between industry interests and groups that represent society at large. Ian Ayres and John Braithwaite are pioneers in articulating tripartism in the context of responsive regulation. This article will provide the foundation for the theoretical framework for tripartism in my research paper.

Balleisen, Edward. “The Global Financial Crisis and Responsive Regulation: some Avenues for Historical Inquiry” (2011) 44 *UBC L Rev* 557.

DeMarco Jerry V and Toby Vigod. “Smarter Regulation: The Case for Enforcement and Transparency” (2007) 17 *J Env L & Prac* 85.

The authors argue that the enforcement of the tools for compliance that are available for the regulator are important in the environmental context. They seem to work in controlling pollution. The paper uses historical and statistical data from Ontario that suggests that an emphasis on enforcement reduced water pollution exceedances. The article adds that enforcement needs to be accompanied by disclosure of environmental performance. It is an additional measure to control pollution. This last part will be used to argue in favour of NGOs so they can have as much information as the regulator has (which is important according to the tripartism model).

———. “Building a Strong Foundation for Action: A Review of Twelve Fundamental Principles of Environmental Resources Management legislation” (2008) 19 *J Env L & Prac* 59.

DeMarco argues that the implementation of environmental rights, the polluter pays principle, access to information, and etc. will guide the exercise of discretion and aid the interpretation of a statute. Other scholars, such as professor Flucker and professor Vlavianos would agree with what DeMarco proposes in this article. For my research, the most relevant part in this article involves the area that covers Access to Information. I will argue that NGOs should have access to all the information as it will guarantee meaningful participation of the public. It will assure compliance from the regulated industry.

Flucker, Shaun. *Bill 2 Responsible Energy Development Act: Setting the stage for the next 50 years of effective and efficient energy resource regulation and development in Alberta*, online: < <http://ablawg.ca/2012/11/08/bill-2-responsible-energy-development-act-setting-the-stage-for-the-next-50-years-of-effective-and-efficient-energy-resource-regulation-and-development-in-alberta>>.

Professor Flucker, in this article, questions the independence of the new provincial regulator, Alberta Energy Regulator from an Administrative and Constitutional law perspective. Professor Flucker is an Assistant Professor at the University of Calgary, Faculty of Law. He is an expert in Administrative law and has done significant research about quasi-judicial tribunals in the context of Environmental law. His paper will be introduced into my research because it has strong arguments of the importance of the independence of a quasi-judicial tribunal.

———. “The Jurisdiction of Alberta’s Energy and Utilities Board to Consider Broad Socio-Ecological Concerns Associated with Energy Projects” (2004-2005) 45 *Alberta Law Review* 1085.

In this journal article, Professor Flucker argues that the now extinct Alberta Energy and Utilities Board had to consider section 3 of the Energy Resources Conservation Act in a broad sense. Hence, the Board had to consider the social, economic, and environmental implications of the project they approved. A decision made by considering only the economic benefits is a narrow interpretation of section 3 of the previously mentioned statute. Even though Alberta Energy and Utilities Board is not existent, this journal will be incorporated to my research paper. The main reason for this is that this paper mentions why an environmental tribunal should take an approach that is not limited to the economic benefit vis a vis industry interests.

Ford, Cristie & Natasha Affolder. “Preface Responsive Regulation in Context, Circa 2011” (2011) 44 *UBC L Rev* 463.

This article offers a new perspective on the evolution of tripartism in the context of responsive regulation. By providing a historical perspective, both authors attempt to indicate the current state of the theory and the weaknesses of it. The article will give me a better understanding of the evolution of the theory and some of the aspects of it that still need to be explored. Natasha Affolder is an Associate Professor at the University of British Columbia. She holds a doctorate in law from Oxford University. She has written extensive literature on environmental issues. Cristie Ford is an assistant professor at the University of British Columbia. Her research of interest is regulatory theory in the context of securities and financial institutions.

Niles, David A. “Hard Habits to Break: Information and Mutual Mistrust in the Regulation of Corporate Polluters” (1993) 1 *Buff Env’tl L J* 149.

This journal argues that the industry has understood the impact some of their activities have had on the environment through the environmental auditing process. However, that

information is not shared with the regulator because the current American regulatory process which is mainly command and control (like the Canadian one), has created tension between the regulator and the industry. This article is relevant to my research because it argues that any regulatory scheme, even a tripartism model, which is mentioned in the paper, requires that the actors in the regulatory process share information if it is successful. The article was published in the Buffalo Environmental Law Journal of the Suny Buffalo Law School. It is also available on Heinonline.

Omarova, Saule T. "Bankers, Bureaucrats, and Guardians: Toward Tripartism in Financial Services Regulation" (2012) 37.3 J Corp L 621.

Shapiro, Sidney A. "The Complexity of Regulatory Capture: Diagnosis, Causality, and Remediation" (2012) 17 Roger Williams U L Rev at 221.

This journal article attempts to provide a working definition of regulatory capture and analyzes possible solutions to avoid capture. It is important to my paper because it offers a summary of the Regulatory Capture review and offers additional footnotes that will offer me more information. According to Wake Forest University, Professor Shapiro is one of the leading American experts in administrative regulation and he is the current Vice-President of the Center for Progressive Reform, a non-profit organization that has a mandate to protect the environment through legal scholarships.

Vlavianos, Nickie. "A Single Regulator for Oil and Gas Development in Alberta? A Critical Assessment of the Current Proposal" (2012) 113 *Resources* 1. online: <http://dspace.ucalgary.ca/retrieve/30431/Resources113.pdf>.

This article by Professor Vlavianos criticized the proposed bill to create a single environmental regulator in Alberta. The article argued for changes in legislation that fosters public participation because it legitimizes the decisions that the environmental regulator makes. For my research, this article is important. My paper is trying to give more participation to society in the decisions that environmental regulators make. I am proposing to use NGOs as means to achieve better public participation. The reasons that professor Vlavianos uses in this paper justify my proposal.

———. *The Legislative and Regulatory Framework for Oil Sands Development in Alberta: A Detailed Review and Analysis*, Occasional Paper No. 21 (Calgary: Canadian Institute of Resources Law, 2007),
online: <<https://dspace.ucalgary.ca/bitstream/1880/47188/1/OP21Oilsands.pdf>>.

———. *The Proposed Single Energy Regulator: Where Are We Now and Where Do We Go from Here?*, online: < <http://ablawg.ca/2012/07/19/the-proposed-single-energy-regulator-where-are-we-now-and-where-do-we-go-from-here/>>.

This article explains some of the deficiencies of the legal framework that created a new provincial regulator. It also argues that fairness and transparency will be diminished in the new process. To draw these conclusions, professor Vlavianos identified the weaknesses of the old model from some literature reviews. Professor Vlavianos searched for measures that will address them in the new legal framework; she concluded that there is nothing in place. Even though the intended audience for the article is lawyers, I believe that legal scholars can benefit from it. The article is important to my research because it argues that the new Alberta Regulator will be subject of the same weaknesses that previous regulators in the province had. If the ERCB, for example, was considered to be captured for some deficiencies in the legislation, this new board, for having the same weaknesses, will also be considered to be captured.

Zinn, Matthew D. "Policing Environmental Regulatory Enforcement: Cooperation, Capture and Citizen Suits" (2002) 21 Stan Env'tl LJ 81.

This Journal suggests that environmental regulations can be effective if there is cooperation between the regulator and the regulated industry. It is effective, among other things, because it reduces cost and increases public participation. However, the author argues that this cooperation makes regulators, in particular environmental regulators, at risk of being captured. The author proposes that a good measure to protect environmental regulator is through the participation of society by suing environmental offenders. Matthew D Zinn is a partner of Shute, Mihaly and Weinberger, and he has intervened in several cases that involved land use and environmental law. He was also listed as a Northern California Super Lawyers "Rising Star." Mr. Zinn has also written several articles on environmental law topics. This article is relevant to my research because it explains why environmental regulators vis a vis boards are likely to be captured and how this happens. The paper also argues that the participation of society can counterbalance the industry interest.

OTHER MATERIALS

Alberta. Regulatory Enhancement Task Force, *Enhancing Assurance: Report and Recommendations of the Regulatory Enhancement Task Force to the Minister of Energy*, December 2010 available at:
<http://www.energy.alberta.ca/Org/pdfs/FinalEnhancingAssuranceReportREP.pdf>

———. *Enhancing Assurance: Developing an Integrated Energy Resource Regulator*, May 2011 available at:
<http://www.energy.alberta.ca/Org/pdfs/REPEnhancingAssuranceIntegratedRegulator.pdf>

REGULATION OF ALLOCATION OF CAPACITY IN PIPELINES

ANNOTATED BIBLIOGRAPHY (IN PROGRESS)

Jennifer Hocking
LL.M. Candidate, University of Calgary
December 13, 2012

This is an annotated bibliography of materials related to my thesis topic. It is a work in progress and should not be taken as an exhaustive review of the relevant literature.

The research will examine the circumstances under which it is appropriate for pipeline companies to enter directly into agreements with shippers for pipeline capacity, and the circumstances under which regulators should allocate capacity on pipelines or oversee these contractual arrangements. Industry representatives and representatives of regulatory agencies will be interviewed for their views. Recommendations may be made for changes to the criteria used by regulatory agencies in reviewing applications related to allocation of capacity in pipelines.

SECONDARY MATERIAL

Barr, Christopher J. "Growing Pains: FERC's Response to Challenges to the Development of Oil Pipeline Infrastructure" (2007) 28 Energy LJ 43.

Christopher Barr is a U.S. lawyer who focuses his practice on regulation of the oil pipeline and natural gas industries. This article will be useful to me as it provides an overview of FERC's regulation of oil pipelines. In the U.S., there is a substantial, long-term need for additional oil pipeline capacity. It explains that previously in the U.S., oil pipelines tended to be owned by producers or by refiners, or as part of an integrated oil company system. From about 1987-2007, more pipelines became independently owned. For independent pipelines, financial commitments from shippers are important for new capacity projects. Shippers will be unlikely to make firm financial commitments if they do not receive assurances that they can reliably use the capacity that they have been required to fund. As a result, pipeline companies in the U.S. have sought declaratory orders from FERC approving, *inter alia*, firm capacity rates in advance of constructing facilities. This article will be useful for me in terms of reviewing the discussion of the criteria used by FERC to determine whether they would be helpful for the NEB, which, like FERC, is a national regulator, and possibly also for the ERCB.

. "Unfinished Business: FERC's Evolving Standard for Capacity Rights on Oil Pipelines" (2011) 32 Energy LJ 563.

This article will be useful to me as it provides a very recent (2011) overview of the approach used by the Federal Energy Regulatory Commission (FERC) in dealing with applications by oil pipeline companies for approval of tariffs including priority access for contract shippers. It suggests that in a series of orders over the past six years, the

Commission has tried to balance the need for guaranteed capacity for parties making long-term contractual commitments against the statutory requirement that pipelines are common carriers that must provide transportation upon reasonable request. It also suggests that there is room for further refinement to FERC's policy. It provides a brief summary of recent FERC orders in the past six years regarding contractual arrangements with shippers. I will be able to compare the criteria used by FERC regarding common carriers against the criteria used by the Energy Resources Conservation Board (ERCB) and National Energy Board (NEB) and make recommendations as a result of this comparison. The article will also be useful for the context it provides on the structure of the oil pipeline industry in the U.S, as well as the history of the common law on common carriers.

Brett, J David & Nadine E Berge. "Oil and Gas Transportation: Is Contract a Viable Alternative to Traditional Regulation?" (2006) 44 *Alta L Rev* 93.

David Brett and Nadine Berge are both energy regulatory lawyers practising in Calgary. This article is useful to me for its overview of the federal (National Energy Board or NEB) and provincial (Alberta Energy and Utilities Board or AEUB at the time this article was written) legislative frameworks regarding access to oil and gas pipelines. It is also useful for the citations given for a number of NEB and AEUB decisions relating to applications regarding priority access to pipelines. The insights contained in this article regarding the interests and concerns of industry players related to access to pipelines provide useful context for my research. The article states that the issue of access or priority access is becoming increasingly important for existing pipelines, expansion to existing lines, and greenfield projects. In fact, the issue of access to pipeline capacity may be determinative of whether a project proceeds. Parties need to know what the ground rules will be concerning access to new pipelines and whether they will be treated as common carrier pipelines. It appears that certain projects will not move forward without long-term contractual commitments. Examples of pipelines where producers have taken the lead in an ownership position in pipelines are given (*i.e.* Alliance Pipeline, Mackenzie Gas Project).

Breyer, Stephen. *Regulation and its Reform* (Cambridge: Harvard University Press, 1982).

Coase, Richard H. "The Problem of Social Cost" (1960) 3 *JL & Econ* 1.

Ivanenko, Vlad. "Modularity Analysis of the Canadian Natural Gas Sector" (2012) 34 *Energy Economics* 1196.

The author is with the Energy Sector, Natural Resources Canada. This paper is important for my research as it describes the structure of the Canadian natural gas sector from an economic perspective. In particular, it describes the types of relationships between pipeline companies and shippers. It also touches on the role of regulators with respect to allocation of pipeline capacity. The footnotes contain references to a number of useful Canadian articles which I will review.

Nowak, Bartłomiej. “Equal Access to the Energy Infrastructure as a Precondition to Promote Competition in the Energy Market: The Case of European Union” (2010) 38 Energy Policy 3691.

The author is an Assistant Professor at the Law Department of Kozminski University in Poland, and is also adviser to the Chairman of the Polish Energy Regulatory Office, and counsel in a law firm. This article is useful to me for its analysis of policy issues relating to the infrastructure for supplying electricity and gas in the European Union (EU). Non-discriminatory and equal access to the electricity and gas transmission and distribution networks is important in order to encourage competition and new investment in infrastructure. The article sets out the requirements for third party access under EU law, and the exceptions to these requirements. The article concludes that third party access has not been achieved yet among Member States, and that this is a major barrier to the development of an open and competitive energy market.

Perrin, Robert M. “Declaratory Relief under Alberta Oil and Gas Legislation” (1980) 18 Alta L Rev 26.

At the time this article was written, the author was a senior solicitor for the Hudson’s Bay Oil and Gas Company. It includes a useful overview of applications for common carrier declarations made in Alberta under the *Oil and Gas Conservation Act* (OGCA) and the criteria applied by the Energy Resources Conservation Board (ERCB) to these applications. As the article was written in 1980, I will have to update the information provided, but the article gave me a useful starting place for my research. The related remedies of common purchaser, rateable take, and common processor are also discussed, which provides some context for common carrier applications. The article states that common carrier declarations were primarily designed to enable use by a “non-owner” of facilities where construction of an alternate gathering or transportation system could not economically be justified, but they could also be awarded in other circumstances (at least in 1980). In 1980, Mr. Perrin indicates that many operating systems were over-built, and spare capacity was available. My other research to date indicates that as of 2012 there is a lack of capacity in oil export pipelines. It will be interesting to compare the old ERCB decisions and provisions of the OGCA mentioned in this article, to the current OGCA provisions and the more recent decisions noted in the Brett and Berge article noted above in this Bibliography, and to see how the ERCB rationale for decisions regarding common carrier applications may have changed as pipeline space became scarce.

_____. “Declaratory Relief under Oil and Gas Legislation – Update” (1981) 34 Alta L Rev 34.

This short article reviews a few decisions of the ERCB related to common purchaser applications and identifies ERCB criteria for a declaration for common purchaser. More importantly for my purposes, it also sets out and discusses the British Columbia (B.C.) legislation passed on July 31, 1979 regarding the remedies of common carrier, common purchaser, and common processor (*Energy Amendment Act*, 1979). I will compare the current B.C. and Alberta legislation on common carrier designations.

Pickl, Mathias & Franz Wirl. “Auction Design for Gas Pipeline Transportation Capacity – The Case of Nabucco and its Open Season” (2011) 39 *Energy Policy* 2143.

The authors are both with the Faculty of Business, Economics and Statistics, University of Vienna, Austria. This article reviews, from an economic perspective, auction designs that can be used to allow gas shippers to book transportation rights on gas pipelines. It describes in detail the process for the Nabucco Open Season Capacity Allocation Process. Nabucco is a proposed international gas pipeline from Turkey to Austria. I will consider whether it would be appropriate for the NEB or ERCB to adopt any of the the auction designs reviewed in this article.

Roggenkamp, Martha M et al, eds. *Energy Law in Europe: National, EU and International Law and Institutions* (New York: Oxford University Press, 2001).

This text contains works by leading European legal scholars regarding energy law in Europe. At the time of editing this book, Martha Roggenkamp was a senior research fellow at the International Institute of Energy Law at the University of Leiden in the Netherlands. It will be useful to me as it provides an overview of European Community energy law and the energy law of a number of member nations. The previous and current market structures of the gas and electricity supply systems in the EU are reviewed. In addition, the European Commission Electricity Directive and Gas Directive are discussed. Models for access to natural gas pipelines are discussed, including negotiated third party access and regulated third party access. This book provides a solid context for my other reading regarding electricity and gas transmission and third party access in the EU.

Schultz, Nikol J. “Light-Handed Regulation” (1999) 37 *Alta L Rev* 387.

At the time of writing the article, the author was the Vice President, Markets and Transportation Policy and General Counsel for the Canadian Association of Petroleum Producers (CAPP). This article will be useful for me for its overview of traditional cost of service pipeline regulation as well as the more recent concept of “lighter-handed” regulation. It will also be useful for its general explanation of the economic rationale for regulation of tolls (rates) and tariffs for pipelines is reviewed, and for its discussion of key decisions of the National Energy Board. The author presents key aspects of the Westcoast Energy Inc. “Framework for Light-Handed Regulation,” (Framework) which was approved by the National Energy Board in 1998. The author signed this Framework as a representative of CAPP. The article includes a brief discussion of light-handed regulation of pipelines by the Commission in Texas and by the Federal Energy Regulatory Commission.

Van der Vijver, Tjarda. “Third Party Access Exemption Policy in the EU Gas and Electricity Sectors: Finding the Right Balance between Competition and Investments” in Martha M Roggenkamp et al, eds, *Energy Networks and the Law, Innovative Solutions in Changing Markets* (Oxford University Press: Oxford, 2012) 333.

Tjarda van der Vijver is a case handler at the Network Sectors & Media Unit, Netherlands Competition Authority, The Hague and an external PhD researcher at

Leiden University, the Netherlands. In this article, the writer discusses the approach used by the European Commission (Commission) regarding third party access (TPA) to new gas and electric infrastructure in the European Union (EU). On the one hand, by requiring third party access to gas and electric facilities, competition is supported. On the other hand, the Commission also wishes to stimulate investment in gas and electricity networks, which may be accomplished by creating exemptions from the requirement for third party access for new infrastructure. This article sets out the criteria used by the Commission to approve exemptions from the TPA rule for new gas and electric infrastructure, and provides an overview of recent Commission decisions. It will be useful for me to compare and contrast these criteria to the criteria currently used by the ERCB and NEB.

Von Hirschhausen, Christian. "Infrastructure, Regulation, Investment and Security of Supply: A Case Study of the Restructured U.S. Natural Gas Market" (2008) 16 Utilities Policy 1.

Christian von Hirschhausen is the Chair of Energy Economics and Public Sector Management at the Dresden University of Technology in Germany. This paper will be useful to me in refining my research questions, as it discusses the relationship between infrastructure regulation and investment in the context of the U.S. natural gas market. It reviews the literature of the past twenty years relating to the interactions among restructuring, regulation, and investment. It provides an overview of the structure of the U.S. gas market. The article concludes that the U.S. natural gas market today is competitive and that this has not impeded infrastructure investments. The footnotes contain references to relevant articles which I will review.

Indirect Expropriation of Oil and Gas Contracts: Factors Taken into Account in Determining Liability

Annotated Bibliography (In Progress)

Omar Chehade
LL.M. Candidate, University of Calgary, Faculty of Law
December 2012

This is an annotated bibliography for my major research paper as a course-based LL.M. student at the University of Calgary, Faculty of Law.

It includes secondary sources related to the issues that will be examined in my research. The main question of the research will be what factors should be taken into account by international arbitral tribunals in determining the liability of the host state as a result of a governmental action that amounts to an indirect expropriation of the host-government contract or oil and gas assets of a foreign company.

Please note that the twelve entries are annotated for the purpose of Law 703 course (Graduate Seminar in Legal Research & Methodology), and it is a work in progress and should not by any means be taken as exhaustive of the relevant literature.

Secondary Material: Books

Alqurashi, Zeyad A. *International Oil and Gas Arbitration* (Voorburg, Netherlands: Oil, Gas & Energy Law, 2005).

This textbook deals with a variety of issues. It distinguishes between direct and indirect expropriation and examines the question of what kind of regulatory action or government interference constitutes indirect expropriation and how this question has been addressed by international arbitral tribunals. The title of the textbook doesn't reflect its content. The textbook examines many questions and essays and each of them is separate from each other. Most of these essays do not fall within the context of "[t]he International Oil and Gas Arbitration". But overall, the textbook will serve as a reference and will contribute to my research especially chapter one because it examines the subject of host-government contracts and their legal nature and characteristics. It will also contribute to the literature review I will be conducting on the distinction between direct and indirect expropriation. The intended audience of this textbook includes practicing lawyers and legal academics.

Grosse, Robert E. *International Business and Government Relations in the 21st Century* (Cambridge: Cambridge University Press, 2005).

Roe, Thomas, Matthew Happold & James Dingemans. *Settlement of Investment Disputes under the Energy Charter Treaty* (Cambridge: Cambridge University Press, 2011).

Secondary Material: Articles

Abdala, Manuel A & Pablo T Spiller. "Damage Valuation of Indirect Expropriation in Public Services" (2003) 14:1 Am Rev Int'l Arb 447.

At the time of writing this article, Abdala was a director at the Law and Economics Consulting Group corporation (LECG) in Washington DC and Buenos Aires and Spiller was a professor of Business and Technology at the University of California, Berkeley, and director at the LECG in Buenos Aires and Emeryville (in California). The main purpose of this article is to examine the methods used for the valuation and assessment of damages incurred by foreign investors and caused by indirect expropriation. Although my research won't address the problem of compensation nor examine the methods used for the assessment of damages, I will make use of this article because it provides significant insights and approaches to indirect expropriation. The article will be of significant help to the literature review I will be conducting on the different forms of indirect expropriation. The article is intended to help practitioners, particularly arbitrators.

Abdala, Manuel A. "Key Damage Compensation Issues in Oil and Gas International Arbitration Cases" (2009) 24:3 Am U Int'l L Rev 539.

In addition to his work at the LECG, Abdala participates as an expert in investment and commercial arbitration disputes and conducts presentations and seminars on indirect expropriation and damage valuation. Also, in this article, Abdala addresses the same issues examined in the previous article but with a focus on oil and gas arbitration disputes (investment and commercial disputes). He justifies this focus based on the high rate of oil and gas disputes under the ICSID arbitral forum (37% of disputes listed "pending" under ICSID in 2007 were related to energy investment disputes). This article is also intended to practitioners (lawyers and arbitrators).

Fortier, L Yves & Stephen L Drymer. "Indirect Expropriation in the Law of International Investment: I Know It When I See It, or Caveat Investor" (2005) 13:1 Asia Pac L Rev 79.

L Yves Fortier is a Canadian lawyer, arbitrator, diplomat and businessman. He worked for many years as a member of the Permanent Court of Arbitration (PCA) and served as President of the London Court of International Arbitration (LCIA). He was appointed as a president of tribunal in many important oil and gas investment disputes under the ICSID forum such as *Duke Energy v Peru*, *ConocoPhillips v Venezuela* and *OEPC v The Republic of Ecuador*. In his article, Fortier considers that the task of defining expropriation will dominate the foreign investment legal context in the future. He considers that the doctrine and case law on expropriation in international investment law remain somewhat unsettled. Therefore he examines this issue in the article. This is a very important paper on indirect expropriation; it reflects the long and significant experience Fortier has in the area of international investment law. The audience

includes academics, scholars and practitioners.

Gazzini, Tarcisio. "Drawing the Line between Non-compensable Regulatory Powers and Indirect Expropriation of Foreign Investment – An Economic Analysis of Law Perspective" (2010) 7:3 *Manchester Journal of International Economic Law* 36.

Tarcisio Gazzini is a professor of law at the VU University Amsterdam, Faculty of Law. The author addresses one of the most critical issues or challenging questions with respect to indirect expropriation. He examines the problem of distinction between actions taken by host governments as part of the legitimate exercise of their regulatory powers and action amounting to indirect expropriation. He develops his own criteria of distinction using a legal and economic approach and arguing that "considerations of efficiency" can play role and guide arbitrators in determining this distinction. This article will be of significant help because it examines one of the main questions that will be raised in my research. The intended audience includes academics and practitioners.

Henckels, Caroline. "Indirect Expropriation and the Right to Regulate: Revisiting Proportionality Analysis and the Standard of Review in Investor-State Arbitration" (2012) 15:1 *J Int'l Econ L* 223.

This article is the most recent paper on indirect expropriation and the factors employed for its determination. Caroline Henckels is a PhD candidate at the University of Cambridge, Faculty of Law. She examines in her article the "proportionality" factor taken into account by arbitral tribunals when dealing with indirect expropriation claims. She argues that this factor or analysis should be employed by arbitral tribunals and in a way that is more deferential to host states. She focuses only on this factor and disregards other factors such as the legitimate expectations of investor and the degree of deprivation and control. She examines the link between proportionality and the standard of review in a comparative way. She concludes that the use of a deferential approach to the proportionality factor with respect to indirect expropriation claims will allow host states to take measures in the public interest. This sounds a very critical article to international arbitral tribunals because they don't employ a deferential approach to host states when using the proportionality factor. It also defends the public interest of host states and argues that there should be sufficient scrutiny to control misuse of public power. The intended audience of this article includes students, scholars and practitioners in the area of international investment law.

Joffé, George et al. "Expropriation of oil and gas investments: Historical, legal and economic perspectives in a new age of resource nationalism" (2009) 2:1 *Journal of World Energy Law & Business* 3.

George Joffé is a professor of policy at the University of Cambridge/Plexus Energy – Centre for International Studies, and Paul Stevens is a professor of economics at the Chatham House/Plexus Energy. This article is a summary of a research paper prepared by Plexus Energy and funded by the Association of International Petroleum Negotiators (AIPN). This article examines the historical, legal and economic aspects of expropriation of oil and gas assets. The authors conduct a doctrinal analysis and provide for factors that could be taken into account by arbitral

tribunals in determining indirect expropriation. They consider that tribunals have developed over time a body of law that demonstrates the factors taken into account in determining whether any particular act of the host government constitutes indirect expropriation or regulatory taking. They discuss some of the factors such as the "sole effects doctrine", the degree of deprivation and control, investor's legitimate expectations and the purpose of the measure and proportionality. This article will provide general background and guidance to my research question especially with respect to the main factors taken into account by arbitral tribunals. The intended audience includes academics and practitioners who need a reference for a historical, legal and economic context.

Schreuer, Christoph. "The Concept of Expropriation under the ECT and other Investment Protection Treaties" (20 May 2005), online: University of Vienna <http://www.univie.ac.at/intlaw/pdf/csunpublpaper_3.pdf>.

The author in this paper discusses the concept of indirect expropriation in light of the ECT and other treaties that include investment protection guarantees. He provides a thorough and detailed description and analysis of the provisions that prohibit direct and indirect expropriation under these treaties. Also, he conducts a doctrinal analysis of some important awards related to indirect expropriation and examines factors taken into account by arbitral tribunals in determining host state's liability. Since I will be conducting a literature review regarding indirect expropriation under multilateral and bilateral investments treaties, this paper will be a very useful reference for my research. This paper is targeted towards legal academics.

Sloane, Robert D & W Michael Reisman. "Indirect Expropriation and its Valuation in the BIT Generation" (2004) 75:1 Brit YB Int'l L 115.

The authors in this article examine the obligations of host states to establish and maintain a legal and normative environment under BITs. They argue that host states must do much more than open their doors to foreign investments and refrain from expropriation but also, they must maintain the minimal legal and regulatory framework that fosters foreign investments. Also, the authors distinguish between the different forms of indirect expropriation and conduct a literature review on the determination and valuation of indirect expropriation in light of many BITs. While comparative analysis between BITs is not part of my methodology, this article will contribute to my major paper through providing a variety of factors for determining indirect expropriation under BITs. Moreover, this article will contribute to my paper through providing a practical approach to distinguish between the different forms of indirect expropriation. The intended audience in this article includes practicing lawyers and legal academics.

Stevens, Paul. "National oil companies and international oil companies in the Middle East: Under the shadow of government and the resource nationalism cycle" (2008) 1:1 Journal of World Energy Law & Business 5.

Subedi, Surya P. "The Case-law on the treatment of foreign investments" in University of London Press, ed, *International Investment Law* (London, United Kingdom: University of London Press, 2005) 134.

This article is a chapter in a textbook. Subedi is a professor of international investment law at the University of Leeds, School of Law. The article examines the history of foreign investment and the concept of expropriation and nationalization within the context of foreign investment law. It highlights the evolution of international arbitral practice in protecting and playing significant role in articulating the international standards of treatment applicable to foreign investors. The article conducts a doctrinal analysis of the concept of expropriation through discussing and analyzing many important cases on direct and indirect expropriation including the Iran-US cases but it disregards the issue of determination of expropriation and host state's liability. This article will serve as a reference and will contribute to my research especially chapter two because it examines the concept of expropriation. The audience includes students, scholars and practitioners interested in international investment law.

Yannaca-Small, Catherine. "'Indirect Expropriation" and the "Right to Regulate" in International Investment Law" (September 2004), online: Organization for Economic Co-operation and Development <<http://www.oecd.org/investment/investmentpolicy/33776546.pdf>>.

At the time of writing this paper, Yannaca-Small was a legal advisor at the Organization for Economic Co-operation and Development (OECD) – Directorate for Financial and Enterprise Affairs (Investment Division). The paper has been developed as an input to the organization's work and effort aimed at enhancing an understanding of indirect expropriation under international investment law. Yannaca-Small's methodology is based on different methods. She conducts a literature review of indirect expropriation in light of international customary law, ECT, North American Free Trade Agreement (NAFTA), European Convention of Human Rights and some BITs. She examines the question of how legal provisions under these treaties articulate the difference between indirect expropriation and the right of governments to regulate without compensation. She also conducts a doctrinal analysis aimed at determining whether indirect expropriation has occurred or not through analyzing many arbitral awards. This paper will be a very useful reference for the literature review I will be conducting on indirect expropriation especially with respect to indirect expropriation provisions under bilateral and multilateral investment treaties. The intended audience is legal academics.

Yannaca-Small, Katia. "Interpretation of the Umbrella Clause in Investment Agreements" (September 2006), online: Organization for Economic Co-operation and Development <<http://www.oecd.org/investment/internationalinvestmentagreements/37579220.pdf>>.

At the time of writing this article, Katia Yannaca-Small was also a legal advisor at the Organization for Economic Co-operation and Development (OECD) – Directorate for Financial and Enterprise Affairs (Investment Division). Her paper gives an overview of the umbrella clause's history and its place in the literature and doctrine. While this paper is descriptive in most of its parts and sections because it focuses on compiling and reviewing umbrella clause provisions under BITs, it provides an analysis of the specific language of this clause in light of the rules and regulations that govern international investment activities, and examines briefly its interpretation by arbitral tribunals. This paper will contribute to my research through providing some answers to the questions that will be raised and related to indirect expropriation claims brought by foreign investors under umbrella clauses, and also in the part related to the interpretation given to the clause by international arbitral tribunals. The intended audience is

students and legal academics.

Annotated Bibliography

A Single Regulator in the Northwest Territories: as Informed by Alberta's Single Regulator:

**Sara Jaremko
LLM Candidate, University of Calgary
December 2012**

This preliminary annotated bibliography is prepared as a component of Law 703 – Legal Research and Methodology in association with a statement of proposed research for the major paper required for completion of the course-based LL.M. program. The major paper will be an analysis of the proposed single energy regulator in the Northwest Territories and of whether its evaluation may be informed by analysis of the impending single energy regulator in Alberta (the Alberta Energy Regulator). This draft annotated bibliography expressly does not purport to be exhaustive of the relevant resources, subject matter or planned research thereon.

Legislation

Mackenzie Valley Resource Management Act, SC 1998, c 25

“An Act to provide for an integrated system of land and water management in the Mackenzie Valley, to establish certain boards for that purpose and to make consequential amendments to other Acts.”

Bill 2: Responsible Energy Development Act, 1st Sess, 28th Leg, Alberta, 2012 (royal assent 10 December 2012), SA 2012, cR-17.3

(establishment of the Alberta Energy Regulator to replace the ERCB, SRB, and Alberta Environment)

Regulations

(to be populated)

Jurisprudence and Tribunal Decisions

Mackenzie Gas Project (16 December 2010), GH1-2004, Volumes 1 and 2, online: NEB
<www.neb-one.gc.ca>

Treaties

(to be populated)

Secondary Sources

Books

Derek R. Armitage, “Environmental Impact Assessment in Canada’s Northwest Territories: Integration, Collaboration, and the Mackenzie Valley Resource Management Act”, in Kevin S. Hanna, ed., *Environmental Impact Assessment: Practice and Participation*, 2d ed (Canada: Oxford University Press, 2009) 211

This textbook was used in the University of Calgary’s Environmental Impact Assessment class in 2011, indicating it is reputable within the community. The chapter provides a good overview of the EIA process with some historical context, includes some discussion of the regulatory process as a whole. The chapter is recent and authoritative, so should provide some context as well as direction for further research.

G. Bruce Doern, ed., *Changing the Rules: Canadian Regulatory Regimes and Institutions* (Canada: University of Toronto Press, 1999)

This collection of essays examines the state of Canadian regulatory regimes: their changes and futures. The book’s parts are: Major Federal Sectoral Regulatory Bodies, the Changing Nature of Framework Regulation, Managing Regulation within the State, and International and Cross-Jurisdictional Regulation. It originated from collaboration by the Carleton University School of Public Administration and the McGill University Centre for the Study of Regulated Industries, so taking into account its date, which is relatively recent but not current, should be quite authoritative depending on the use. Much of this is well beyond the scope of my paper (ie political analysis, level of detail, types of regimes reviewed), but I may be able to pick out some evaluative elements, perhaps from the introductory article or the conclusions. Perhaps it will complement the information gained from Lessard (below).

John Donihee, (contributing ed.), Jeff Gilmour and Doug Burch, *Resource Development and the Mackenzie Valley Resource Management Act: The New Regime: Proceedings of a Conference held in Calgary, 17-18 June 1999* (Calgary: Canadian Institute of Resource Law, 1999)

This collection contains an overview of the then-new Mackenzie Valley Resource Management Act, which is an overview of energy regulation in the area. The Canadian Institute of Resources Law is a renowned institution in its field and any publications from that institute will be exceedingly useful. The audience is to lawyers but also to professionals working in the area. It will be helpful in providing information about the existing regulatory regime in that part of the Northwest Territories, which is said to be all but the Inuvialuit Settlement Area. It will also be useful for directing further research.

Jonathan A. Lesser and Leonardo R. Giacchino, *Fundamentals of Energy Regulation* (Vienna, Virginia: Public Utilities Reports, Inc., 2007)

This is a textbook for energy regulation written in the United States. It was used in the University of Calgary’s Energy Law class in 2011, indicating it is reputable within the

community. Within the text is a chapter describing regulatory theory. Although this is American, it may provide some general principles from which to draw evaluatory criteria for the purposes of this paper, bearing in mind that that section is meant to be brief and secondary.

Dan MacKinnon, *A Compendium of the Northern Regulatory Regime* (Canada: CCH Canadian, 1986)

Compendium is the proper word. This book has a broad scope: it lists the main components of the regime: laws, procedures, guidelines and committees. There are many useful tables and charts. For example, he will list each type of permit, summarize the application, provide the agency, related legislation, procedure, committees, guidelines, and consultation. It is obviously out of date, but will be useful in developing a sense of context, as it provides a marvelous overview of the regulatory framework. This book was created under a contract with the Northern Affairs Program of the Department of Indian Affairs and Northern Development so is highly authoritative for its time. The intended audience is more lay-person, which is quite useful for an overview, and digestible given the passage of time. It is lamentable that there is no equivalent contemporary apparent (that I have found to date).

Journal Articles

Nigel Bankes, “Giving away the Arctic farm to piddly little companies – Federal (mis) management of northern oil and gas rights” ABLawg (1 October 2012), online: ABLawg: <http://ablawg.ca/2012/>>

Nigel Bankes is a recognized expert in the field and a professor at the University of Calgary Faculty of Law. This blog post is about the granting of exploration licenses in offshore NWT. It is not directly on point, but may provide some direction towards the framework for the bidding stage of industrial development. The blog post itself is unlikely to find its way into the final paper, however, it may be useful in searching for similar posts in the ABLawg and similar blogs, and for guiding further research.

Nickie Vlavianos, “An Overview of Bill 2: Responsible Energy Development Act – What are the changes and What are the issues?” ABLawg (15 November 2012), online: ABLawg: <http://ablawg.ca/2012/>>

This blog post provides an overview of Bill 2 which establishes the single regulator in Alberta. Nickie Vlavianos is an Assistant Professor at the University of Calgary Faculty of Law and is thus an authoritative source. The audience is to fellow legal academics and decision-makers who may read the blog, and the article is written in a relatively accessible manner. The article will be useful in providing an understanding of Bill 2, and may provide some useful quotes and summaries. It will be useful in directing further research.

Canadian Government Documents

Indian Affairs and Northern Development Canada, *2005 Northwest Territories Environmental Audit*, by SENES Consultants Limited, 2005, online: <<http://www.aadnc-aandc.gc.ca/>>

Indian Affairs and Northern Development Canada, *2010 Northwest Territories Environmental Audit*, by SENES Consultants Limited, 2010, online: < <http://www.aadnc-aandc.gc.ca/eng/>>

Indian and Northern Affairs Canada, *Road to Improvement: The Review of the Regulatory Systems: Across the North*, by Neil McCrank, Minister's Special Representative for the Northern Regulatory Improvement Initiative (Ottawa: Minister of Public Works and Government Services Canada, 2008)

Neil McCrank is a past chair of the Alberta Energy Resources Conservation Board, and was commissioned for this report. The 152 page report is an excellent, government-sourced summary from 2008 complete with recommendations. The report is extensive and comprehensive, creating a very authoritative source. It is also readable and well-organized. This will be a highly useful resource and should provide much direction on further research.

Media

“Ottawa mulls creating ‘super’ N.W.T. review board” (2 March 2012), online: CBC News <<http://www.cbc.ca/news/>>.

This news article reports that AANDC is “moving ahead with plans to eliminate regional land and water boards in the NWT”. “Land claims do allow for one board for the Mackenzie Valley” says Stephen Traynor, director of Resource Policy and Programs with AANDC, and the “department is working on amendment to the MVRMA”. This is the article that inspired me to change my proposed topic for application to the LLM program. I will have to follow up from this article to find out what exactly is happening with this ‘super’ board and who is making it happen, and how far along this process is.

Aboriginal Affairs and Northern Development Canada, Press Release #2-3341, “Government of Canada Launches an Action Plan to Improve Northern Regulatory Regimes” (3 May 2010) online: Aboriginal Affairs and Northern Development Canada <<http://www.aadnc-aandc.gc.ca/eng/1100100015534/1100100015535>>

This press release outlines the Canadian government's intention to improve northern regulatory regimes, citing aspirations of effectiveness, predictability, and certainty. As a press release by AANDC, it is highly authoritative considering that it is also current – this is the government position on the matter. The plan includes changes to the regulatory framework, environmental protection, and aboriginal consultation. The release further attaches to a Backgrounder on the “Action Plan to Improve Northern Regulatory

Regimes”. This document does not expressly refer to a single regulator, but describes streamlining and removing barriers to investment. It will also direct further research.

Other

Alternatives North, *A Response to the “Road to Improvement” Report by Neil McCrank on Regulatory Systems Across the North* (Yellowknife: August 2008) online: <www.aged.alternativesnorth.ca/pdf/ANResponseToTheMcCrankReport.pdf>

This document is a Yellowknife-based social justice agency’s critique of the 2008 McCrank report. It critiques that report as overly sympathetic to industry, among other things, and advocate implementation of the recommendation of the 2005 NWT Environmental Audit (“the legitimate and legally-required process for improving the integrated resource management system that was supposed to be established pursuant to the Mackenzie Valley Resource Management Act (MVRMA)”). The document is rather short but notable, and it may point in some other good directions. This organization is not (yet) known to be reputable; however, this document may provide a refreshing balance to the conversation.

Mackenzie Valley Land and Water Board, *“Perspectives on Regulatory Improvement in the Mackenzie Valley* (18 May 2011), online: Mackenzie Valley Land and Water Board <http://mvlwb.com/sites/default/files/documents/Perspectives_on_Regulatory_Improvement_in_the_Mackenzie_Valley-MVLWB.pdf>

The MVLWB here provides a position to AANDC’s 2010 Action Plan to Improve Northern Regulatory Regimes. As one of them main relevant regulatory bodies in the NWT, this document will be authoritative. The intended audience is stated to be the federal government, however, the piece’s composition and placement online provide for public consumption. The piece addresses specifically recommendations for regulatory change and related issues, regarding current weaknesses and “input for improvement”. It will be very valuable for the paper, both in demonstrating the MVLWB’s position as well as providing insight to the current and future regimes.

Northern Oil and Gas Directorate, Indian and Northern Affairs Canada and Canadian Association of Petroleum Producers, *Oil and Gas Approvals in the Northwest Territories: Gwich’in Settlement Area: a guide to regulatory approval processes for oil and natural gas exploration and production on Gwich’in lands and Crown lands in the Gwich’in Settlement Area of the Northwest Territories*, by Erlandson & Associates Consultants, February 2002, online:< <http://www.oilandgasguides.com/>

Northern Oil and Gas Directorate, Indian and Northern Affairs Canada and Canadian Association of Petroleum Producers, *Oil and Gas Approvals in the Northwest Territories: Southern Mackenzie Valley: a guide to regulatory approval processes for oil and natural gas exploration and production on public lands in the Southern Mackenzie Valley*, October 2000, online: < <http://www.oilandgasguides.com/>>

Northern Oil and Gas Directorate, Indian and Northern Affairs Canada and Canadian Association of Petroleum Producers, *Oil and Gas Approvals in the Northwest Territories: Sahtu Settlement Area: a guide to regulatory approval processes for oil and natural gas exploration and production on Sahtu lands and Crown lands in the Sahtu Settlement Area of the Northwest Territories*, February 2002, online: < <http://www.oilandgasguides.com/>>

Northern Oil and Gas Directorate, Indian and Northern Affairs Canada and Canadian Association of Petroleum Producers, *Oil and Gas Approvals in the Northwest Territories: Inuvialuit Settlement Region: a guide to regulatory approval processes for oil and natural gas exploration and production on Inuvialuit lands and Crown lands in the Inuvialuit Settlement Area of the Northwest Territories*, June 2001, online: < <http://www.oilandgasguides.com/>>