

Oil Transportation Regulatory Framework

By Michael Polich, Great Lakes Commission Sea Grant Fellow

Pipelines, railroads, and vessels are each utilized to transport oil in the United States and Canada. The unique history of these modes of transportation, coupled with the intricacies of moving the vast quantity of oil used by both countries has spawned a specialized legal framework for the industry.¹ While each mode of transportation has its own legal framework, there are multiple laws, regulations, and rules that are applied across the whole transportation sector. The ease with which oil is transported between both countries is a testament to the legal cooperation between the United States and Canada. These factors make it difficult to fully understand the complexities of oil transportation in and around the Great Lakes. The following is an outline of the legal framework developed for oil transportation in the United States and Canada, with a focus on specific legal challenges affecting the Great Lakes region.

United States

The U.S. Department of Transportation (DOT) is the lead agency for oil transportation in the United States. A number of agencies, such as the Environmental Protection Agency and the United States Coast Guard, provide additional assistance to the DOT. The states are typically involved in enforcing federal regulations or setting complementary state requirements. The regulatory scheme for oil transportation in the United States has evolved into a command and control framework, with specific requirements that each transportation method must meet. Such a scheme is significantly different than the goal-oriented approach utilized by the Canadian government. The following sections describe the regulatory framework for responding to oil spills and how regulations for each mode of transportation may try to prevent spills.

Response

The legal requirements for oil spill response have been built up over time through the passage of three major laws: the Clean Water Act in 1972; the Comprehensive Environmental Response, Compensation, and Liability Act in 1980; and the Oil Pollution Act of 1990. These laws have led to the creation of the National Oil Spill and Hazardous Substance Pollution Contingency Plan, also known as the National Contingency Plan (NCP).² The NCP is laid out in a tiered approach, with national coordination centered with the National Response Team (NRT)³ and Regional Response Teams (RRTs) managing Regional Contingency Plans (RCPs).⁴ Area Contingency Plans (ACP) exist to handle specific sensitive locations, and

¹ A. B. Klass, *et al.*, *Transporting Oil and Gas: U.S. Infrastructure Challenges*, 100 Iowa L. Rev. 947

² 40 CFR 300

³ 40 CFR 300.110

⁴ 40 CFR 300.115

are composed of relevant federal, state, and local agencies.⁵ The Coast Guard leads the response when a spill occurs in a coastal region, while the Environmental Protection Agency handles land based spills.⁶

If a spill occurs, an On-Scene Coordinator (OSC) is appointed by the lead agency. The OSC is directly responsible for coordinating recovery efforts during a spill.⁷ They have broad power to direct the response effort at the federal, state, local, and private level.⁸ Their primary responsibilities include spill assessment, monitoring, response assistance, and evaluation.⁹ The OSC relies on the plans laid out in the NCP, and relevant RCPs and ACPs. Ultimately, it is up to the OSC to determine when spill cleanup is complete, but they must consult with trustees of natural resources and the governor(s) of the affected state(s).¹⁰

Pipelines

The Pipeline Safety Act (PSA) grants DOT regulatory control over the safety of hazardous liquid pipelines.¹¹ This includes pipelines that transport crude oil. The Pipeline and Hazardous Materials Safety Administration (PHMSA) is the DOT sub-agency with regulatory control over interstate and foreign commerce pipeline safety, and has issued the regulations outlined below. The PSA expressly forbids federal control over the location or routing of a pipeline, leaving such regulation to the states.¹²

Under the PSA, federal regulations and enforcement apply to interstate crude oil pipelines, unless a state certifies that it will assume those responsibilities.¹³ A certified state must adopt the same minimal federal standards, but may adopt additional, more stringent standards so long as they are compatible with federal rules. Within the Great Lakes region, only Indiana, Minnesota, and New York have certified state programs, none of which have more stringent standards than those developed by PHMSA.¹⁴

Inspections are only required for crude oil pipelines in ‘high consequence areas’¹⁵ every five years.¹⁶ In cooperation with PHMSA, state inspectors perform many¹⁷ of these federally required pipeline

⁵ 40 CFR 300.210(c)

⁶ 40 CFR 300.120(a)

⁷ 40 CFR 300.135

⁸ 40 CFR 300.135(d)

⁹ 40 CFR 300.300 - 300.315

¹⁰ 40 CFR 300.160(a)

¹¹ 49 U.S.C. § 60102

¹² 49 U.S.C. § 60104(e)

¹³ 49 U.S.C. §§ 60105- 60106

¹⁴ <http://www.nwf.org/~media/PDFs/Regional/Great-Lakes/Oil%20Pipelines%20in%20the%20Great%20Lakes%20Region%20Report%20v3.ashx>

¹⁵ 49 CFR 195.450

¹⁶ 49 CFR 195.452

¹⁷ About three-fourths of all pipeline inspectors are state employees. Paul W. Parfomak, *DOT's Federal Pipeline Safety Program: Background and Key Issues for Congress*. Congressional Research Service, 7-5700. May 20, 2016.

inspections, ensuring safety procedures are followed.¹⁸ Due to budget constraints at the state and federal level, most on-site pipeline inspections are done by inspectors employed by the pipeline companies.¹⁹

PHMSA regulations require pipeline operators to prepare and submit a response plan.²⁰ Each response plan must include procedures for responding to a worst-case discharge,²¹ and must be consistent with the NCP and applicable RCPs and ACPs.²² These plans must identify environmentally and economically sensitive areas, include a description of the operator's response management system (including areas of finance, logistics, operations, planning, and command),²³ and identify training, spill detection, and mitigation procedures.²⁴ The plan must also describe the responsibilities of the operator, as well as federal, state, and local agencies in removing a discharge and mitigating substantial threats of a discharge.²⁵

PHMSA regulations also cover pipeline design, construction,²⁶ operation, and maintenance.²⁷ Each operator must report any accidents and submit an annual report to PHMSA.²⁸ These reports must include the existence of any safety related conditions involving pipelines in service; including corrosion, abnormal loading, material defects, malfunctions/operator errors, and leaks.²⁹

The above regulations are enforced through PHMSA administrative actions, civil and criminal court actions, and citizen suits. Enforcement through administrative actions or civil suits can result in temporary or permanent injunction, punitive damages, and assessment of civil penalties.³⁰ In determining damages, PHMSA and the courts must consider the nature of the violation, including adverse impact on the environment, and the character of the violator, including degree of culpability, history of prior violations, ability to continue doing business, and compliance efforts.³¹

¹⁸ Paul W. Parfomak, *DOT's Federal Pipeline Safety Program: Background and Key Issues for Congress*. Congressional Research Service, 7-5700. May 20, 2016

¹⁹ Lena Groeger, *Pipelines Explained: How Safe are America's 2.5 Million Miles of Pipelines?* ProPublica, November 15, 2012.

²⁰ 49 CFR §194.101

²¹ Worst-case discharge means the largest foreseeable discharge of oil in adverse weather conditions. This volume is determined individually for each pipeline. 49 CFR 194.105

²² 49 CFR §194.107

²³ 49 CFR §194.107(c)(3)

²⁴ 49 CFR §194.107(c)

²⁵ 49 CFR §194.107(b)(2)(iii)

²⁶ 49 CFR parts §195.100 – 266

²⁷ 49 CFR parts §195.400 – 452

²⁸ 49 CFR 195 Part B

²⁹ 49 CFR § 195.55

³⁰ 49 U.S.C. § 60120(a)(1)

³¹ 49 U.S.C. § 60122(b)

States have control over pipeline planning and siting, typically through state utility commissions.³² Because the federal government has control over pipeline safety, state utility commissions can only require pipelines to meet federal safety regulations when determining pipeline siting. Increased awareness of oil transportation has caused many state utility commissions to more closely examine proposed pipeline routes and plans to meet federal regulations.³³

The challenges of siting pipelines have led states to grant eminent domain power for pipeline construction.³⁴ Each state has different requirements before a pipeline gains eminent domain power. For example, in Illinois, before a pipeline is granted eminent domain power, it must receive a certificate of public convenience and necessity or a certificate of need from the Illinois Commerce Commission.³⁵ With no federal oversight in pipeline siting, pipeline operators that plan interstate pipelines must to receive siting approval from multiple states.

Rail

Congressional and regulatory action pertaining to oil transported by rail has been the result of recent oil train accidents and a surge in Bakken crude oil transported by rail. This section attempts to cover this recently evolving topic, but new statutes, regulations, and orders may make some of what is described below incomplete.

The DOT has delegated regulatory control of hazardous freight to PHMSA and the Federal Railroad Administration (FRA). These two DOT subagencies work in consultation with one another, but generally PHMSA regulates the hazardous material aspect of the transportation safety, while the FRA regulates railcar design and operation.

PHMSA currently requires comprehensive written response plans for the transportation of oil only in a quantity greater than 42,000 gallons per 'package.'³⁶ PHMSA defines a package as a receptacle used to confine/transport oil, with a compartmented railcar considered a single package.³⁷ An individual railcar carrying crude oil typically has a capacity of 30,000 gallons. Therefore, trains transporting crude oil are not currently required to prepare comprehensive written plans, even if they transport more than 42,000 gallons total.

Basic response plans are required for containers with a capacity of 3,500 gallons or more.³⁸ Basic plans outline the response to discharges that may occur, considering the maximum potential discharge of the

³² A. B. Klass, et al., *Transporting Oil and Gas: U.S. Infrastructure Challenges*, 100 Iowa L. Rev. 982

³³ Sara Grosman *et al.*, *After the Marshall Spill: Oil pipelines in the Great Lakes*. National Wildlife Federation, 2011

³⁴ A. B. Klass, et al., *Transporting Oil and Gas: U.S. Infrastructure Challenges*, 100 Iowa L. Rev. 982

³⁵ A. B. Klass, et al., *Transporting Oil and Gas: U.S. Infrastructure Challenges*, 100 Iowa L. Rev. 1031

³⁶ 49 CFR 130.31(b)

³⁷ 49 CFR 130.5

³⁸ 49 CFR 130.2

contents from the package, and identifies private personnel and equipment available to respond to a discharge.³⁹ These plans do not need to consider a spill from the entire train, but often do.

To ensure response plans include a description of the oil being transported, PHMSA has outlined testing and classification procedures for crude oil. The offeror must certify that the oil to be transported is “properly classified, described, packaged, marked, and labeled.”⁴⁰ PHMSA also to classifies subsamples of crude oil being shipped around the country to be better understand the unique properties of different crude oil sources and ensure offerors are properly classifying their product.⁴¹

Because federal oil transportation rules hadn’t been updated since the recent increase in oil transported by rail, states, dealing with the increase firsthand, began to act on their own. In 2015, the New York State Office of the Attorney General petitioned the DOT for rulemaking to include vapor pressure limits on oil transported by rail.⁴² In some cases, states created their own safety regulations to augment federal requirements. In 2014, Minnesota passed a law that required more state railway inspections, expanded oversight of railroad operations, and local education for emergency planning.⁴³

On May 7th, 2014, the DOT issued an order requiring each railroad transporting 1,000,000 gallons or more of Bakken crude oil in a single train to provide certain information in writing to the State Emergency Response Centers (SERCs) for each state in which it operates such a train.⁴⁴ The notifications must include an estimate of the weekly number of trains that are expected to travel through each county within the state, routes over which the trains will be transported, and a description of the petroleum crude oil and applicable emergency response information.⁴⁵

Recent congressional action – the Fixing America’s Surface Transportation Act of 2015 (“FAST Act”)⁴⁶ - required Class I railroads to generate accurate, real-time electronic train information that can be provided “to State and local first responders, emergency response officials, and law enforcement personnel that are involved in the response to or investigation of an accident, incident, or public health or safety emergency involving the rail transportation of hazardous materials.”⁴⁷ While the DOT is working through implementing these new requirements, the 2014 DOT order is still in effect.⁴⁸

³⁹ 49 CFR 130.31

⁴⁰ 49 CFR 172.204(a)(1)

⁴¹ Preliminary Guidance from OPERATION CLASSIFICATION, Safety Alert, Pipeline and Hazardous Material Safety Administration. January 2, 2012

⁴² 82 FR 5499

⁴³ Minnesota Statute 115E

⁴⁴ Emergency Restriction/Prohibition Order – Petroleum Crude Oil Railroad Carriers - DOT-OST-2014-0067, May 7, 2014

⁴⁵ Emergency Restriction/Prohibition Order – Petroleum Crude Oil Railroad Carriers - DOT-OST-2014-0067, page 2. May 7, 2014

⁴⁶ Pub. L. No. 114-94

⁴⁷ 82 FR 6451

⁴⁸ 82 FR 5505

In 2015, PHMSA and the FRA (in consultation with Transport Canada) issued regulations that control the routing, speed, braking, and railcar design of high-hazard flammable trains (HHFTs).^{49,50} Railroads transporting HHFTs are required to annually review train routing and select the practicable route posing the least overall safety and security risk.⁵¹ To lessen the potential for human error, ‘positive train control’ systems are to be installed across the country by 2018.⁵² The new rules also require HHFTs to not exceed 50 mph.⁵³ Additionally, all HHFTs must be equipped with a two-way end-of-train braking system by 2023.⁵⁴ Finally, new railcars manufactured for use in HHFTs must meet DOT 117 or 117P specifications.⁵⁵ DOT 111 and CPC–1232 cars must be phased-out or retrofitted by 2025.⁵⁶ During the phase-out, any train not meeting the DOT 117 or 117p design requirements are limited to 40 mph in High Threat Urban Areas.^{57, 58}

Railroad inspections are carried out in coordination between federal and state inspectors to ensure compliance with safety regulations.⁵⁹ States must meet specific federal requirements before they are granted authority to enforce federal regulations.⁶⁰ Federal and state inspections determine how railroads meet regulatory obligations with respect to planning, maintenance, training, and supervision, not specific inspections of track, equipment, or the handling of hazardous materials by the railroads.⁶¹

Vessels

Currently, no vessels transport crude oil on the Great Lakes.⁶² Recent fluctuations in the price of oil and the availability of transportation methods available have generated some interest in Great Lakes oil vessel transportation. The following outlines the legal framework that oil transporters on the lakes would have to follow.

The Oil Pollution Act of 1990 (OPA) was enacted in response to the Exxon *Valdez* environmental disaster. Much of the targeted legislation and resulting regulations are aimed at the transportation of crude oil

⁴⁹ A high-hazard flammable train (HHFT) is a continuous block of 20 or more tank cars loaded with a flammable liquid or 35 or more tank cars loaded with a flammable liquid dispersed through a train. 49 CFR 171.8

⁵⁰ 80 FR 26643

⁵¹ 49 CFR 172.820(e)

⁵² 49 CFR 236.1005

⁵³ 49 CFR 174.310(a)(2)

⁵⁴ 49 CFR 174.310(a)(3)

⁵⁵ 49 CFR 174.310(a)(4)

⁵⁶ 49 CFR 173.243

⁵⁷ High Threat Urban Area (HTUA) are areas comprising one or more cities and surrounding areas including a 10-mile buffer zone outlined for each state and listed in 49 CFR Appendix A to Part 1580. 49 CFR 1580.3

⁵⁸ 49 CFR 174.310(a)(2)

⁵⁹ 49 CFR 212.101(a)

⁶⁰ 49 CFR 212.103(a)

⁶¹ 49 CFR 212.101(b)(1)

⁶² N. Vanderwall, *Lake Superior Refinery Investigates Petroleum Shipping*, April 25, 2013, available at <http://greatlakesecho.org/2013/04/25/lake-superior-refinery-investigates-petroleum-shipping/>.

by vessels. Unless specifically mentioned otherwise, a responsible party for a spill that is covered by the OPA could be a pipeline, railway, or vessel. The main charge of the OPA is to address the liability of responsible parties for oil spills into the navigable waters of the United States. While the OPA was in reaction to an oil spill on the ocean, the act specifically covers all navigable waters of the United States, including the Great Lakes.

The OPA set up the Oil Spill Liability Trust Fund to be used to pay costs related to spill recovery when responsible parties deny liability or are slow to pay.⁶³ The fund is financed through a tax on crude oil produced or imported to the United States. The Oil Spill Liability Trust Fund generates about \$500,000,000 each year.⁶⁴ The Internal Revenue Service has concluded that oil-sands-derived crude oil (mostly from Canada) is not subject to this tax.⁶⁵ While not taxable, the Oil Spill Liability Trust Fund will still pay for oil-sands-derived crude spill recovery costs.⁶⁶

Under the OPA, responsible parties are strictly and jointly and severally liable for the removal of oil and consequent damages resulting from an oil spill. Additional liabilities may be imposed under state laws.⁶⁷ Removal costs may be recovered by the United States, affected states, Indian tribes, and any person that has incurred removal costs associated with the NCP. If the responsible party denies liability or does not settle within 90 days, funds may be withdrawn from the Oil Spill Liability Trust Fund.

While removal costs are uncapped, damages under the OPA are capped, dependent upon the type of vessel or facility from which the spill originated.⁶⁸ A responsible party is specifically liable for damages to natural resources, real or personal property, subsistence use, revenues, profits and earning capacity, and the loss of public services.⁶⁹ Punitive damages are not recoverable under the OPA.⁷⁰ Responsible parties have limited defenses to liability under the OPA – an act of god, act of war, or act/omission of a third party.⁷¹ Vessel owners are required to show the financial ability to cover the potential maximum liability for a spill.⁷²

⁶³ 26 U.S. Code § 9509

⁶⁴ Ramseur, Jonathan. *“Oil Sands and the Oil Spill Liability Trust Fund: The Definition of “oil” and Related Issues for Congress,” Congressional Research Service, 7-5700.* February 15, 2017

⁶⁵ A 1980 House committee report stated “the term crude oil does not include synthetic petroleum, e.g., Sale oil, liquids from coal, tar sands, or biomass, or refined oil.” The Internal Revenue Service relied on this determination when they issued a 2011 Technical Advice Memorandum that exempted tar sands from the tax responsible for the Oil Spill Liability Trust Fund.

⁶⁶ The Oil Spill Liability Trust Fund generates about \$500,000,000 each year

⁶⁷ 33 U.S.C. § § 2718(a) and (c)

⁶⁸ 33 U.S. Code § 2704

⁶⁹ 33 U.S. Code § 2702(b)(2)

⁷⁰ *Clausen v. M/V New Carissa*, 171 F. Supp. 2d 1127

⁷¹ 33 U.S. Code § 2703(a)

⁷² 33 U.S. Code § 2716

The OPA also created requirements for vessel response plans (VRPs).⁷³ The exact type of VRP depends on the type and size of the vessel,⁷⁴ but all must be consistent with the NCP and any applicable RCPs and ACPs.⁷⁵ Most vessels, including unmanned barges, must have a response plan that include notification procedures, shipboard spill mitigation procedures, shore-based response activities, and training/exercise procedures.⁷⁶ A vessel operator may contract with an ‘Oil Spill Removal Organization’ (OSRO) to streamline their response plans.⁷⁷ OSROs must meet minimum response requirements specific to their region of coverage.⁷⁸ Inspections of merchant vessels carrying crude oil are required annually.⁷⁹ States may also have their own inspection laws.⁸⁰

Canada

In contrast to the regulatory framework developed in the United States, Canada has a much more goal oriented scheme. Generally, the rules and regulations outline a goal, and the regulated entities must prove to the regulating agency their procedures meet those goals. This requires cooperation between regulators and industry, but allows for more flexibility. The following sections describe the regulatory framework for oil transported through pipelines, railways, and vessels in Canada.

Pipelines

International and interprovincial Canadian pipelines are regulated by the National Energy Board (NEB). The NEB promotes the safety, security, environmental protection, and efficient energy infrastructure in the Canadian public interest. The National Energy Board Act (NEB Act) is the controlling legislation for Canadian pipelines,⁸¹ with the NEB setting rules through the National Energy Board Onshore Pipeline Regulations (OPR).⁸² These rules are goal oriented, allowing regulated entities to develop their own procedures to meet said goals. Guidance notes were published by the NEB in 2013 to help regulated entities better meet the goals developed in the OPR.⁸³

As required under the OPR, regulated entities must establish a management system that is systematic, explicit, comprehensive, and proactive in managing conditions that impact the safety and security of the company’s pipelines, employees, public, and the environment.⁸⁴ The OPR requires each pipeline

⁷³ 33 CFR 155.1010

⁷⁴ 33 CFR 155.1035-11045

⁷⁵ 33 CFR 155.1030(h)(1)

⁷⁶ 33 CFR 155.1030

⁷⁷ *Guidelines for the U.S. Coast Guard Oil Spill Removal Organization Classification Program*. 16465, page 6. April 27, 2001.

⁷⁸ *Guidelines for the U.S. Coast Guard Oil Spill Removal Organization Classification Program*. 16465, page 17. April 27, 2001.

⁷⁹ 46 U.S. Code § 3714(a)(1)

⁸⁰ 46 U.S. Code § 60106

⁸¹ R.S.C., 1985, c. N-7

⁸² SOR/1999-294

⁸³ Guidance Notes for the National Energy Board Onshore Pipeline Regulations Sections 47.2 and 55, and Annex A

⁸⁴ SOR/1999-294 – 6.1

company have an accountable officer to ensure the establishment of systems and procedures that meet the goals outlined in the OPR.⁸⁵

Required under the OPR are emergency management programs,⁸⁶ environmental protection programs,⁸⁷ and damage prevention programs.⁸⁸ The OPR requires these programs be systematic, comprehensive, explicit, and proactive. This includes identifying hazards, managing risks, training employees, monitoring, and practicing a continual process of improvement. The emergency management program must include emergency response plans, including detailed product information, description of response equipment, areas requiring special consideration, and internal and external roles for response.⁸⁹ Site specific plans are required for sensitive areas, including areas with large populations or those that are environmentally sensitive. The emergency response plans must be submitted to the NEB for review. A pipeline is required to be inspected every three years by the operator.⁹⁰ NEB has the power to inspect a pipeline's compliance with their management programs, and violation of OPR requirements can result in in fines, compliance orders, and jail time.⁹¹

Specific standards for pipeline design, construction, operation, and maintenance have been left to the industry to develop. The Canadian Standards Association (CSA) has taken the lead in developing pipeline standards since the 1960s, borrowing extensively from standards developed by the American Standards Association.⁹² These standards have been adopted by reference throughout the OPR and subsequent guidance notes.⁹³ The most current standards can be found in CSA Z662.⁹⁴ The CSA standards are developed through a committee comprised of members spanning the range of regulators and operators.⁹⁵

If a pipeline spill were to occur, a negligent operator would be liable for all damages caused by the spill.⁹⁶ Pipeline operators can avoid liability if they can prove to a court that all reasonable steps were taken to prevent a spill and a third-party contractor was responsible. Pipeline operators must have sufficient financial capability (\$1 billion for major operators) to cover the costs and damages of a potential spill.⁹⁷

⁸⁵ SOR/1999-294 – 6.3(3)

⁸⁶ SOR/1999-294 – 32

⁸⁷ SOR/1999-294 – 44

⁸⁸ SOR/1999-294 – 43

⁸⁹ Guidance Notes for the National Energy Board Onshore Pipeline Regulations – Annex A,

⁹⁰ SOR/99-294 – 53-55

⁹¹ SOR/2013-138

⁹² *Comparison of US and Canadian Transmission Pipeline Consensus Standards*, Michael Baker Jr. Inc., pg. 18. May 2008.

⁹³ SOR/1999-294 – 4(1)(d)

⁹⁴ CSA Z662, 7th Edition, January 1, 2015

⁹⁵ *Comparison of US and Canadian Transmission Pipeline Consensus Standards*, Michael Baker Jr. Inc., pg. 18. May 2008

⁹⁶ S.C. 2015, c. 21

⁹⁷ S.C. 2015, c. 21 – 48.12(5)

Rail

Railway safety is controlled by Transport Canada through the Railway Safety Act (RSA) and all regulations and guidance pursuant to it. Generally, the RSA requires railroad companies to be responsible and accountable for the safety of their own operations, while the regulators ensure these operations do not harm people or the environment. Industry operations approved by the regulators can be legally recognized as equal to other regulations.

Railroad companies are required to have safety management systems (SMS).⁹⁸ SMSs must include processes for safety policies, including: identifying safety concerns, implementing remedial action, and continually improving of safety management.⁹⁹ The SMS regulations do not prescribe specific actions that railroads must follow, but instead create a framework that ensures a culture of safety. Transport Canada oversees SMSs, and focuses on verifying that SMSs are in place, being used, and are effectively improving safety. Specific inspections of tracks and cars are performed by the railroad company, with additional inspection requirements for cars transporting dangerous goods.¹⁰⁰ The provinces have the option to implement additional requirements, but many defer to the federal regulations.¹⁰¹

The Transportation of Dangerous Goods Act (TDG Act) and subsequent regulations control the transportation of dangerous goods by rail. The TDG Act builds the framework for preventing and responding to incidents and spills. Emergency response assistance plans (ERAP) are required by the TDG Act when certain hazardous materials are transported. ERAPs describe the specialized response capabilities, equipment, and procedures that will be used to assist emergency responders in addressing an accident. Currently, an ERAP is not required for the transportation of large volumes of crude oil, but there is preliminary consultation open for this to change.¹⁰² The TDG Act also requires strict classification requirements for crude oil transported by rail.¹⁰³

Much like in the United States, recent events have sparked additional safety requirements for oil transported by rail in Canada. In response to the 2013 Lac-Mégantic train disaster, the Transportation Safety Board (TSB) issued a report that outlined specific shortcomings in Transport Canada's regulations of oil transportation by rail.¹⁰⁴ Transport Canada responded to this report with new regulations and emergency directives. Transport Canada issued an emergency directive increasing the minimum crew size from one to two operators for trains carrying hazardous material and requirements for leaving trains

⁹⁸ SOR/2015-26

⁹⁹ SOR/2015-26(5)

¹⁰⁰ Railway Freight Car Inspection & Safety Rules

¹⁰¹ S.O. 1995, CHAPTER 2

¹⁰² *Part 7 of the Transportation of Dangerous Goods Regulations: Emergency Response Assistance Plans (ERAPs)*, closing May 1, 2017. <http://www.letstalktransportation.ca/part7eraps>

¹⁰³ SOR/2016-95

¹⁰⁴ Railway Investigation Report R13D0054, August 2014.

unattended.¹⁰⁵ Transport Canada also adopted similar regulation to those made by PHMSA and the FRA in 2015. This includes the phase out of DOT-111 and CPC-1232 cars¹⁰⁶ (accomplished in November, 2016),¹⁰⁷ speed and route restrictions,¹⁰⁸ and specific ERAPs for crude oil.¹⁰⁹

Vessels

Transport Canada is responsible for the regulation of marine transportation in Canada. The Canada Shipping Act, 2011¹¹⁰ is the main legislation enacting Transport Canada's regulations. These laws apply to both domestic and foreign vessels in Canadian waters.

The Canadian Coast Guard's (CCG) Environmental Response program is responsible for ensuring the cleanup of any vessel oil spills.¹¹¹ This includes monitoring cleanup efforts of the polluter, or managing cleanup when polluters are unknown, unwilling, or unable to respond.¹¹² The CCG develops response plans for each geographic area, with regional response plans accounting for specific regional variances.¹¹³

The Canada Shipping Act requires vessels¹¹⁴ to have response plans that are reviewed by Transport Canada. These plans include an arrangement with response organizations to handle a worse case spill.¹¹⁵ The response organizations must have up-to-date procedures to protect the environment and the health and safety of personnel involved in cleanup.¹¹⁶ These plans and procedures must consider the contingency plans for the geographic area that are issued by the CCG.¹¹⁷ Vessel operators may contract with OSROs to streamline their response plans. The OSRO for the Great Lakes region is the Eastern Canada Response Corporation. Vessel certificates are issued by Transport Canada after an inspector determines the vessel complies with the Canada Shipping Act.¹¹⁸

¹⁰⁵ Emergency Directive Pursuant to Section 33 of the Railway Safety Act, Transport Canada. July 23, 2013.

¹⁰⁶ Protective Direction No. 38, Transport Canada. July 13th, 2016.

¹⁰⁷ Transport Minister delivers on promise to accelerate removal of legacy DOT-111 tank cars from crude oil transport, Transport Canada. October 31, 2016.

¹⁰⁸ Emergency Directive Pursuant to Section 33 of the Railway Safety Act Rail Transportation of Dangerous Goods, Transport Canada. October 23, 2014.

¹⁰⁹ Protective Direction No. 33, Transport Canada. April 23rd, 2014.

¹¹⁰ S.C. 2001, c. 26

¹¹¹ Canadian Coast Guard Environmental Response - Marine Spills Contingency Plan National Chapter. April, 2011

¹¹² Canadian Coast Guard Environmental Response - Marine Spills Contingency Plan National Chapter. 4.1. April, 2011

¹¹³ Canadian Coast Guard Environmental Response - Marine Spills Contingency Plan National Chapter. 2.3. April, 2011

¹¹⁴ Oil tankers of 150 gross tonnage or more; vessels of 400 gross tonnage or more that carry oil as cargo or as fuel; and groups of vessels that are towed or pushed, are of 150 gross tonnage or more in aggregate and carry oil a cargo. SOR/2008-275 – 2(1)

¹¹⁵ SOR/95-405 – 3

¹¹⁶ SOR/95-405 – 3(2)

¹¹⁷ SOR/95-405 – 3(3)

¹¹⁸ S.C. 2001, c. 26 – 11(2)

Canada follows the “polluter pays” principal for vessel discharges as described in the Marine Liability Act.¹¹⁹ Vessels are wholly responsible for any pollution damage caused by a spill, unless it can be shown the spill was the result of an act of war, unavoidable natural disaster, or caused by a third party.¹²⁰ Vessels are required to maintain insurance or financial security linked to the tonnage of the vessel.¹²¹

International Agreements

The international nature of oil transportation in and around the Great Lakes has necessitated cooperation between the United States and Canada. The Great Lakes Water Quality Agreement (GLWQA) establishes the framework for binational cooperation to restore and protect the water quality of the Great Lakes. The agreement specifically addresses oil discharges from vessels¹²² and notification of planned pipeline activities.¹²³ Two binational agreements, CANUSLAK and CANUSCENT, both born out of the GLWQA, address joint contingency response plans (JCPs).

CANUSLAK was created to provide for a binational response to an oil spill in the waters of the Great Lakes.¹²⁴ In the event of a spill, each country’s Coast Guard will monitor and respond to any event in their jurisdictions. If the event has the potential to affect both countries, the country initially responding to the spill must notify the other as soon as possible.¹²⁵ If an international cleanup effort is needed, International Liaison Officers will be exchanged between the two countries.¹²⁶ These officers can speak for their own nation’s on-scene coordinators. CANUSLAK also has procedures for customs and immigration in the event of a joint response.¹²⁷

CANUSCENT has similar provisions to CANUSLAK, but creates a binational response framework to an oil spill on the connecting waterways of the Great Lakes.¹²⁸ For CANUSCENT, the United States Environmental Protection Agency and Environment Canada work together to plan and respond to inland oil spills. An International Joint Advisory Team (IJAT) was created by CANUSCENT to address international issues during an oil spill. Upon the request of either nation, the IJAT facilitates the regional response, but does not manage the on-scene response, which is left to the individual nations.¹²⁹ A Regional Joint Response Team (RJRT) for the Great Lakes region is responsible for planning and response for specific nuances of the region.¹³⁰

¹¹⁹ S.C. 2001, c. 6

¹²⁰ S.C. 2001, c. 6 – Schedule 5, Article III

¹²¹ S.C. 2001, c. 6 – Schedule 5, Article V

¹²² 2012 Great Lakes Water Quality Agreement. Annex 5

¹²³ 2012 Great Lakes Water Quality Agreement. Article 5

¹²⁴ CANUSLAK Great Lakes Operational Supplement to the Joint Marine Pollution Contingency Plan. Annex 1, Section V.

¹²⁵ CANUSLAK Great Lakes Operational Supplement to the Joint Marine Pollution Contingency Plan. Annex 1, Section VII.

¹²⁶ CANUSLAK Great Lakes Operational Supplement to the Joint Marine Pollution Contingency Plan. Annex 1, Section VI.

¹²⁷ CANUSLAK Great Lakes Operational Supplement to the Joint Marine Pollution Contingency Plan. Annex 1, Section VIII.

¹²⁸ Canada–United States Joint Inland Pollution Contingency Plan. ISBN 978-0-662-47605-4, 2009.

¹²⁹ Canada–United States Joint Inland Pollution Contingency Plan. Section 301. ISBN 978-0-662-47605-4, 2009.

¹³⁰ Canada–United States Joint Inland Pollution Contingency Plan. Section 302. ISBN 978-0-662-47605-4, 2009.

Conclusion

With multiple modes of transportation and variance across multiple levels of government, transportation of oil around the Great Lakes is complicated. In the United States, each mode of transportation is controlled through federal regulations typically enforced by the states. In Canada, each mode of transportation is generally regulated through goals to be met by the transporter. The different legal framework developed for each mode of transportation in either country creates a dynamic situation for oil moving through the region – if the regulations for one mode of transportation change, there is typically a cascading impact on the other modes of transportation across both countries. A list of the laws and agencies that apply to the different modes of transportation in each country is provided below in Table 1.

Table 1 - Applicable Laws and Controlling Agencies

	Mode of Transportation	Applicable Laws	Controlling Agency
United States	Pipeline	Pipeline Safety Act	U.S. Department of Transportation - Pipeline and Hazardous Material Safety Administration
	Rail	Fixing America's Surface Transportation Act	U.S. Department of Transportation - Federal Railroad Administration - Pipeline and Hazardous Material Safety Administration
	Vessel	Oil Pollution Act	U.S. Department of Transportation U.S. Coast Guard U.S. Environmental Protection Agency
Canada	Pipeline	National Energy Board Act	National Energy Board
	Rail	Railway Safety Act Transport of Dangerous Goods Act	Transport Canada
	Vessel	Canada Shipping Act Marine Liability Act	Transport Canada Canadian Coast Guard