

Hazardous Liquids Pipelines – Regulation and Due Diligence

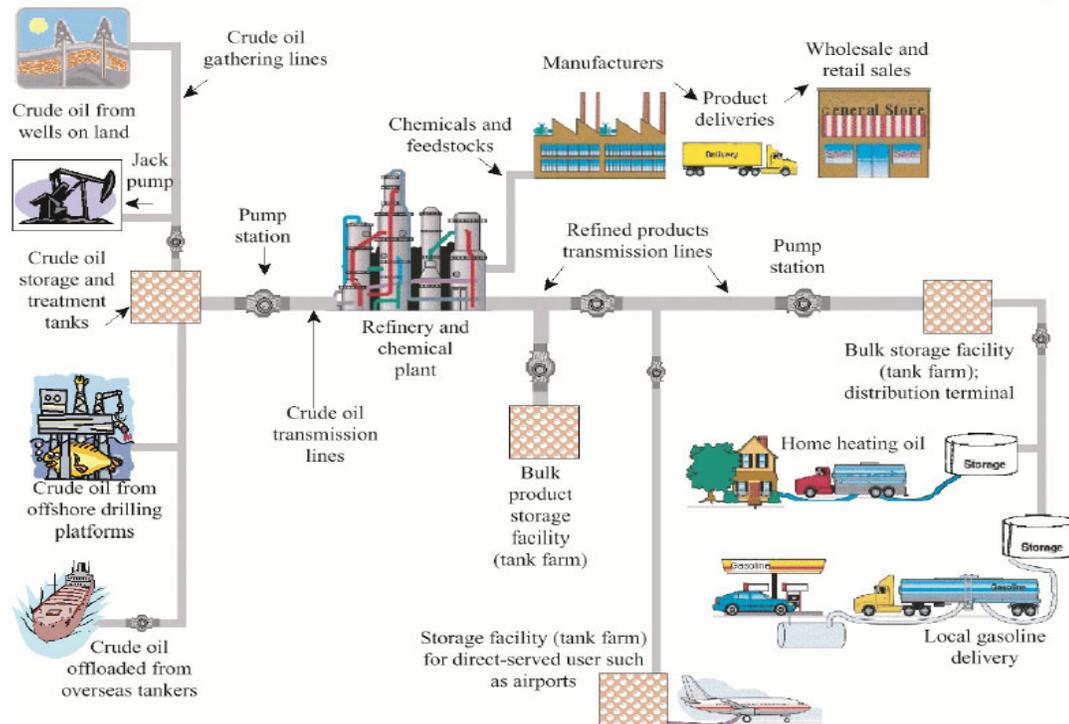
By Charles Brownman¹

1. Overview / Introduction

Since being introduced sometime in the mid- to late-1800s, pipelines have been recognized as being the best method of transporting large quantities of oil, refined petroleum products and natural gas over land. Compared to shipping by rail, pipelines have a lower cost per unit, larger capacity, and frequently offer more flexibility. In 2005, then-U.S. Transportation Secretary Norman Y. Mineta recognized pipelines as being the “unsung heroes of our economy.”²

Today, a vast network of more than 180,000 miles of pipelines crisscross the lower 48 states,³ comprised of approximately 55,000 miles of crude oil trunk lines (larger diameter pipelines that connect producing regions with consumer areas), 30,000-40,000 miles of crude oil gathering lines (smaller diameter pipelines that gather oil from wells and connect to the larger trunk lines), and about 95,000 miles of petroleum product lines, flow lines associated with well operations, and contaminated water pipelines containing the water left following separation from the crude oil and other hydrocarbons.⁴ The following diagram⁵ illustrates how hazardous liquids move through pipelines from the well to consumers:

Hazardous Liquid Pipelines – From Well to Consumer



Pipelines are closely-regulated; however, despite that oversight, many pipelines still corrode and leak due to numerous causes (including environmental abuse, external damage, inherent manufacturing or installation defects, soil movements and instability, and third party damage).

Since most pipelines are buried – anywhere between two and five feet below the surface –it is difficult, expensive and time-consuming to dig them up and inspect them visually.

From these facts, one could conclude that pipeline leaks are neither uncommon nor unexpected, so that environmental risk and damages are part of the cost of doing business. Because of the knowledge that pipelines frequently leak it has made estimating, assessing and allocating the cost of these environmental risks a difficult and important task for both the sellers and buyers of a pipelines, This article is intended to

provide a brief exposure of the regulatory paradigm and the methods of using due diligence to minimize the buyer's exposure to liability from pipeline leaks.

2. Technical Background: Why Do Pipelines Corrode and Leak?

There are several reasons why oil corrodes a pipeline. First, when oil is pumped out of the ground, it contains "contaminants" that include water, carbon dioxide and sulfur. (In fact, the amount of sulfur contained in the oil is the basis for the oil being categorized as "sweet" or "sour".) If enough contaminants collect in a steel pipe over a long-enough amount of time, the contaminants can eat away at the steel. Second, when produced out of the ground, the crude oil is hot, and the oil is then heated further to enhance its flow; however, the heat exacerbates corrosion. For those reasons, pipelines use "pipeline inspection gauges" (commonly referred to as "pigs") to inspect and clean the pipeline without stopping the flow of the product in the pipeline; but contaminants can still collect and cause corrosion of the steel.

One would think that with improved technology and materials, corrosion (the second leading cause of pipeline leaks and "reportable incidents") would never occur. However, using stainless steel pipes to further minimize the possibility of corrosion is considered overly expensive; even if it were not, the cost of replacing the tens of thousands of miles of steel pipe already in place would be staggering.

Pipeline manufacturers do paint the outer surface of the pipeline with a protective coating, but doing so on the inside of the pipe is not feasible – either before the lengths are welded together (the welding and assembly process would effectively destroy and eat away at the coating), or after assembly (the pipe is too long to effectively coat the inside).

Also, once a pipeline is buried below ground, the pipeline is subject to soil shifting and instability, environmental damage, and damage from third party excavations, all of which (in addition to normal manufacturing defects and bad welding) can cause corrosion.

3. The Regulatory System

Because crude oil is volatile and flammable, the relevant pipeline safety law defines it as a "hazardous material"⁶; therefore, pipelines that transport crude oil and refined petroleum products are considered and regulated as "hazardous material" pipelines.⁷

Oil pipeline regulation is handled primarily by two federal agencies – the Federal Energy Regulatory Commission ("FERC"), which provides oversight on more of the commercial aspects of pipelines (such as permitting, siting and transmission rates); and the Department of Transportation's Pipeline and Hazardous Materials Safety Administration ("PHMSA"), which establishes and enforces design, construction, operation, maintenance, testing and inspection standards. (In addition to FERC and PHMSA as the primary regulators, other, more narrowly-focused federal agencies that can be (and often are) involved in regulation, reporting and oversight include the Environmental Protection Agency (especially when there is a spill or a leak); the Bureau of Ocean Energy Management, Regulation and Enforcement (formerly the Minerals Management Service) (when the pipelines are offshore); and the Occupational Safety and Health Administration (regarding working conditions and employee safety)). In addition, state and local governments can also regulate pipelines, primarily through zoning and land use regulations, environmental requirements, fish and wildlife protections, historic preservation, and highway/street transportation limitations.

The PHMSA's authority stems from the 1994 Pipeline Safety Act (the "PSA")⁸, which combined and recodified, without substantive changes, the two then-existing pipeline safety statutes, the Hazardous Liquid Pipeline safety Act of 1979 (formerly found at 49 U.S.C. §§ 2001 to 2014) and the Natural Gas Pipeline Safety Act of 1968 (formerly found at 49 U.S.C. §§ 1671 et seq.). But it has been over the last decade that there has been a significant increase in the amount and scope of legislation and regulation governing pipelines.

Characterized by some as "a piece of legislation with sweeping mandates and impacts upon the [pipeline] industry",⁹ the Pipeline Safety Improvement Act of 2002 (the "2002 PSIA")¹⁰ not only re-authorized the federal government's pipeline safety program through 2006, it tightened federal safety requirements by mandating inspections within five to ten years, and established a pipeline hierarchy – having pipeline operators differentiate pipeline segments based on where they were, the lands around them and the impact a leak or release would have. Operators were required to (i) identify and designate such critical areas either as "high consequence areas" (or "HCAs"; these include navigable waterways, and areas of high population or

high population density¹¹) or as “unusually sensitive areas” (“USAs”; environmental resources or drinking water areas that would be unusually sensitive to damage from a release of a hazardous liquid),¹² and (ii) conduct a risk-based analysis of these areas by performing baseline integrity assessments (known as PHMSA’s “integrity management program”).

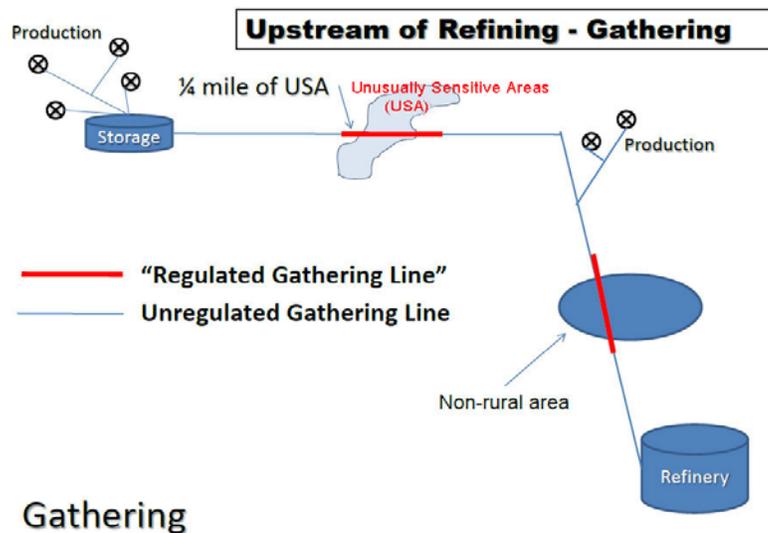
In the course of the next re-authorization cycle, Congress passed the Pipeline Integrity, Protection, Enforcement and Safety Act of 2006 (the “PIPES” Act).¹³ Continuing the regulatory expansion begun in the 2002 PSIA, the PIPES Act (i) broadened the assessment and management of safety-related risks by having PHMSA work more closely with states to minimize damage caused by excavation (still one of the leading causes of fatal pipeline incidents¹⁴), (ii) mandated confirmation by a senior executive attesting to the accuracy of a pipeline’s integrity management program performance reports, (iii) expanded the scope of PHMSA’s regulatory jurisdiction to include “low stress (i.e., low pressure) pipelines” (this was added in reaction to an oil leak of approximately 250,000 gallons into Prudhoe Bay, caused by a quarter-inch hole in a corroded low-pressure pipe operated by BP that went undetected for five days¹⁵), and (iv) strengthened PHMSA’s enforcement capabilities.

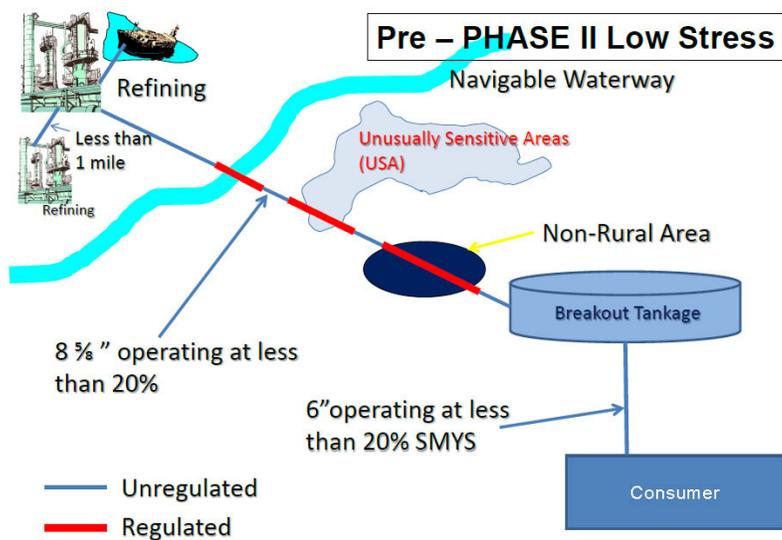
The enforcement procedures and sanctions utilized by PHMSA can be found in the Code of Federal Regulations,¹⁶ and they include Warning Letters (when PHMSA believes that a violation exists), Notices of Probable Violations (which begin the enforcement actions), and informal hearings (which are not required to conform to the Administrative Procedure Act, but which still lead to Final Orders containing civil penalties). Two such cases involved Chevron USA, Inc. and Kinder Morgan Energy Partners, L.P.¹⁷

Current and Future Regulatory Proceedings

Despite the passage of the 2002 PSIA and the 2006 PIPES Act, regulators have not kept up with issuing regulations for these laws permitting oversight gaps to still exist. For example, in response to the requirement in the PIPES Act for oversight of low-stress pipelines, PHMSA published a Final Rule in June, 2008 that applied Phase 1 of a planned two-phase approach to regulating all rural onshore hazardous liquid low-stress pipelines.¹⁸ This Final Rule applied to only seventeen percent of existing large-diameter, low-stress pipelines, and PHMSA stated that it would need to come back with a second rulemaking to regulate all other applicable low-stress pipelines.¹⁹ On June 22, 2010, PHMSA issued its Notice of Proposed Rulemaking (“NOPR”) to have its existing pipeline safety regulations apply to all low-stress pipelines within five years of the effective date of the new regulations.²⁰

The following diagrams, presented to a House subcommittee on June 29, 2010, depict the current status of PHMSA’s low-stress pipeline regulation:





Low-Stress Pipelines Downstream from Refining

In addition to the ongoing low-stress pipeline proceedings, other types of pipelines remain exempt from PHMSA's safety regulations, including pipelines located offshore and in inlets of the Gulf of Mexico; and pipelines that transport hazardous liquids through onshore production, refining, storage or manufacturing facilities. Numerous safety and environmental groups have suggested that such exemptions weaken the public's confidence that the PHMSA is properly ensuring pipeline safety, and "result in regulatory coverage that is piecemeal at best and confusing, difficult to implement and enforce, and inadequate at worst."²¹

As a result of the Deepwater Horizon oil spill in the Gulf of Mexico, PHMSA issued a June 2010 Advisory Bulletin reminding onshore hazardous liquid pipeline operators to review and update mandatory oil spill response plans to ensure that it includes a response to a "worst case discharge".²²

Finally, because PHMSA's current authorization is due to expire this year (the PIPES Act only re-authorized it through 2010), the House Subcommittee on Railroads, Pipelines, and Hazardous Materials held a June 29 hearing to take testimony and reexamine PHMSA's regulatory actions.

4. Buying a Pipeline

As previously stated, pipelines are likely to corrode and leak. Therefore, if you buy a pipeline, the chances are you will be confronted by a spill and potential remediation, plus other kinds of liabilities.

(a) A Word about Acquisitions and Liability

While it is outside the scope of this article to discuss in detail the structure of a purchase and sale agreement ("PSA"), or allocations of liability in the context of a business transaction, what can be said is that the issues of who retains or accepts pre-closing and ongoing liabilities after closing, and how/when those liabilities are identified and quantified, are two of the most hotly-negotiated major points in any pipeline deal. These issues initially manifest during the most basic discussion of a deal's structure – whether the buyer will be purchasing assets or stock – and then carryover into various sections of the PSA.

In a stock deal, the purchaser acquires the entity that owns the assets, meaning that purchaser will acquire both the assets and liabilities of the entity being sold. Alternatively, an acquisition of assets allows the buyer (at least in theory) to avoid liabilities; however, a buyer may still up with liability, under certain circumstances the buyer may be held liable based on a variety of theories of "successor liability" developed by various jurisdictions over the last thirty years.²³

(b) Transactional Due Diligence

In most transactions, the buyer's objective of understanding all the current and potential liabilities and other issues related to the asset or entity being sold (especially given the possibility of inadvertently acquiring

liabilities) conflicts with the seller's reluctance to provide information, knowing that it might be liable if its disclosures are ultimately deemed to be incomplete, false, misleading or inaccurate. But business considerations (such as the timing of the closing, the purchase price, and requirements mandated by the buyer's lender) will often result in the PSA that includes some environmental representations regarding the condition of the pipelines or environmental contamination, combined with disclosure schedules containing most of the information sought by the buyer.²⁴

Environmental representations typically cover matters such as the pipeline's past use; timely and complete governmental filings; the presence (or lack thereof) of hazardous materials; pending or threatened governmental or third party actions; and whether or not any cleanup programs are planned or are ongoing. Once drafted and combined with any applicable disclosures, the representations often serve as a starting point for the buyer's due diligence efforts, which will be the buyer's primary way of determining what liabilities (and potential liabilities) it might be managing or dealing with, post-closing.

The buyer's environmental investigation will usually take the form of an environmental due diligence audit (an overall assessment of a company's compliance and performance program)²⁵, or an Environmental Site Assessment ("ESA"). An ESA can be performed at two levels – "Phase I" and "Phase II".

A Phase I ESA provides an overview of the environmental condition and environmental history of a particular property, with the goal being to identify actual and potential problems based primarily on a review of documentation and regulatory databases, and a walk-through inspection of the site, but not the collection of physical samples. If significant problems are discovered during the course of the Phase I inspection, the report will generally recommend specific follow-up testing, remediation and/or studies. Those follow-up procedures and tests constitute the basis of the Phase II ESA. The Phase II ESA is a more intrusive investigation that includes collection and analysis of soil and/or groundwater samples to determine the quantitative values of different contaminants in the samples.

The general trend in acquisitions is to permit a buyer to avoid or mitigate some environmental liabilities if it undertakes a thorough environmental due diligence review. In April, 2000, the Environmental Protection Agency ("EPA") issued a final policy statement that revised portions of its 1995 Policy on "Incentives for Self-Policing" (commonly referred to as the "Audit Policy"), established standards for conducting a Phase I ESA, and established conditions which, if met, could result in significant mitigation of some penalties imposed on the buyer for environmental violations that occurred before the assets were purchased by the buyer.²⁶ In March of this year, EPA scheduled a "listening session" to listen to the views of both stakeholders and the general public on the current practices for its "All Appropriate Inquiries" ("AAI") standards, which allows *bona fide* prospective purchasers to have a defense against Superfund liabilities when buying certain kinds of properties.

5. Conclusions / Practical Considerations

The conclusions to be drawn from this brief overview are these:

First, despite regulatory oversight, better equipment and more training, a leak, spill or other "reportable incident" is almost certain to occur. Therefore, a pipeline operator should prepare for that occurrence, before it occurs, by having a spill response plan in place, training its employees what to do (and perhaps more importantly, what NOT to do) and who to call when a spill happens, and making sure their insurance will adequately cover the cost of the spill and cleanup.

Second, regulatory compliance cuts both ways. The contents of spill reports can be used by third party claimants, so care should be taken in the preparation of spill reports, and counsel should review them before they are filed with the appropriate regulatory agencies.

Third, in addition to obtaining broad representations from the seller, a buyer of a pipeline should access all reports made to the regulatory agencies, talk to the appropriate operating personnel of the seller, and conduct, at a minimum, a Phase 1 ESA.

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² Remarks at the Association of Oil Pipe Lines at the American Petroleum Institute's Third Annual Legal Issues and Policy Roundtable (July 28, 2005).

³ See Staff of H. Comm. on Transp. and Infrastructure, 111th Cong., Hearing on "The Safety of Hazardous Liquid Pipelines: Regulated vs. Unregulated Pipelines." 1 (Comm. Print 2010) [hereinafter *Subcommittee Staff Summary*], available at http://transportation.house.gov/Media/file/Rail/20100629/SSM_RR.pdf. See, also, American Petroleum Institute, *Transportation*, (updated Nov. 2008), <http://www.api.org/ehs/performance/transportation/index.cfm>. (a 400-member national trade association that "represents all aspects of America's oil and natural gas industry").

⁴ See *id.* at 1, 2.

⁵ Cynthia L. Quarterman, Dep't. of Transp., Hearing on the Implementation of the Pipeline Inspection, Protection, Enforcement and Safety Act 2006 and Reauthorization of the Pipeline Safety Program, (May 20, 2010), [hereinafter *Quarterman*] available at http://www.phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/House%20T&I%20Pipeline%20Reauthorization%20Hearing%20Written%20Testimony_May%2020%202010.pdf.

⁶ 49 U.S.C. § 60101(a)(4).

⁷ See U.S. Department of Transportation Departmental websites, such as <http://www.phmsa.dot.gov/public/definitions> and <http://hazmat.dot.gov>.

⁸ See Subcommittee Staff Summary, *supra* note 3.

⁹ Brigham A. McCown & Dawn Whelan Theiss, "Safeguarding the Energy Pipeline Transportation System & the PIPES Act of 2006", 3 Tex. J. of Oil, Gas & Energy Law 22, 27(2008) [hereinafter *McCown*].

¹⁰ Pub. L. No. 107-355, 116 Stat. 2985 (2002).

¹¹ 49 C.F.R. § 195.450 (2005).

¹² 49 C.F.R. §§ 195.2, 195.6 (2005).

¹³ Pub. L. No. 109-468, 120 Stat. 3486, 3496 (2006).

¹⁴ Quarterman, *supra* note 5.

¹⁵ Alan Bailey, *BP: Learning from Oil Spill Lessons*, Petroleum News, Vol. 11, No. 20, May 14, 2006, <http://www.petroleumnews.com/pntruncate/573947058.shtml>; John Roach, *Alaska Oil Spill Fuels Concerns Over Arctic Wildlife, Future Drilling*, Nat'l. Geographic News, March 20, 2006, http://news.nationalgeographic.com/news/2006/03/0320_060320_alaska_oil.html.

¹⁶ 49 C.F.R. § 190.201 – 190.237 (2007).

¹⁷ See McCown, *supra* note 8, at 48-49 (describing and discussing more fully the cases).

¹⁸ Pipeline Safety: Protecting Unusually Sensitive Areas from Rural Onshore Hazardous Liquid Gathering Lines and Low-Stress Lines, 73 Fed. Reg. 31,634 (June 3, 2007) (to be codified at 49 C.F.R. pt. 195), available at <http://edocket.access.gpo.gov/2008/pdf/E8-12099.pdf>.

¹⁹ *Id.* at 31,641.

²⁰ Pipeline Safety: Applying Safety Regulation to All Rural Onshore Hazardous Liquid Low-Stress Lines, Vol. 75 Fed. Reg. 35,366 (June 22, 2010) (to be codified at 49 C.F.R. pt. 195) available at <http://edocket.access.gpo.gov/2010/2010-14998.htm>.

²¹ Subcommittee Staff Summary, *supra* note 1, at 5 (citing comments filed with PHMSA in a proposed rulemaking by the Pipeline Safety Trust).

²² Pipeline and Hazardous Materials Safety Admin., Pipeline Safety: Updating Facility Response Plans in Light of the Deepwater Horizon Oil Spill, ADB-10-05, (June 23, 2010) *available at* <http://www.phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/Pipeline/ADB-10-05%20Updating%20ResponsePlans.pdf>.

²³ See, e.g., Lawrence Schnapf, *Managing Environmental Liability-Business Transactions and Brownfield Redevelopment*, cha. 10 (Juris Publishing 2010).

²⁴ See, e.g., Richard L. Burleson, *Anatomy Lessons (Part 2): Dissecting a Successful PSA*, Oil and Gas Financial Journal (March 1, 2008) <http://www.ogfj.com/index/article-display/323063/articles/oil-gas-financial-journal/volume-5/issue-3/capital-perspectives/anatomy-lessons-part-2-dissecting-a-successful-psa.html>.

²⁵ See, e.g., the Timothy A. Wilkin, *Audits Will Protect Your Environmental Compliance Investment*, Oil and Gas Financial Journal, (October 1, 2008) <http://www.ogfj.com/index/article-display/341881/articles/oil-gas-financial-journal/volume-5/issue-10/capital-perspectives/audits-will-protect-your-environmental-compliance-investment.html>.

²⁶ Incentives for Self-Policing: Discovery, Disclosure, Correction, and Prevention of Violations. 65 Fed. Reg., 19,618, (April 11, 2000) *available at* <http://www.epa.gov/oecaerth/resources/policies/incentives/auditing/auditpolicy51100.pdf>.