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Oil and Gas Regulation in the United States: Overview

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Oil and Gas Regulation in the United States: Overview

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A Q&A guide to oil and gas regulation in the United States.

This Q&A gives a high level overview of the domestic oil and gas sector, rights to oil and gas, health safety and the environment, sale and trade in oil and gas, tax and enforcement of regulation. It covers transfer of rights; transportation by pipeline; environmental impact assessments; decommissioning; waste regulations and proposals for reform.

This Q&A is part of the multi-jurisdictional guide to energy and natural resources. For a full list of content visit www.practicallaw.com/energy-mjg.

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I. Domestic Sector

A. Describe the Domestic Sector for Oil and Gas, Including Liquefied Natural Gas (LNG).

Statistics from the International Energy Agency (IEA) show that the US is the third-largest producer of oil and the second-largest producer of natural gas in the world. According to the US Energy Information Administration (EIA), the US imported 0.41 trillion cubic feet (Tcf) of natural gas in the form of LNG in 2010. However, due to increased domestic production, LNG imports are predicted to decrease to 0.14 Tcf by 2035.

The US oil and gas industry is divided into three sectors:

- Upstream (exploration and production).
- Midstream (processing, storage and transportation).
- Downstream (refining, distribution and marketing).

The US has no national oil company.

There are five "supermajor" publicly-owned oil and gas companies (US-based ExxonMobil, Chevron and ConocoPhillips and overseas-based BP and Royal Dutch Shell) that are integrated across all three sectors of the industry in the US. Other independent companies specialise in particular sectors of the industry. Occidental, Anadarko and Apache specialize in upstream operations; Kinder Morgan, in midstream operations; and Valero, Sunoco and Tesoro, in downstream operations. Service companies that support the industry include Baker Hughes, Schlumberger and Halliburton.

The US oil and gas industry is regulated through statutes and rules promulgated by the federal and individual state governments.

B. What Percentage of Domestic Energy Needs Is Met By Oil and Gas?

65% of the energy used in the US derives from oil and natural gas. According to the EIA the breakdown is:

- Oil: 40%.
- Natural gas: 25%.
- Coal: 22%.
- Nuclear: 8%.

- Renewable: 4%.

B. Domestic Policy

I. What Is the Domestic Policy on Oil and Gas?

a. Government

The federal government and individual state governments each play a role in developing the domestic oil and gas policy. The US energy policy is a compendium of various laws from various federal departments and agencies and their state equivalents, including the:

- Department of Interior (DOI).
- Department of Transportation (DOT).
- Department of Energy (DOE).
- Environmental Protection Agency (EPA).

Congress and state legislatures have developed a general energy policy in order to promote the domestic exploration and production of oil and gas and other sources of energy while protecting the environment. Congress has passed the Energy Policy Act of 2005 to encourage the domestic production of oil and gas, electricity, and other forms of energy. The Act clarified issues relating to the application of the Safe Drinking Water Act to hydraulic fracturing and the application of the EPA's storm water rules to oil and gas production sites. It also included a renewable fuel programme which required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. This programme was expanded by the Energy Independence and Security Act (EISA) of 2007 and subsequent acts of Congress. The renewable fuel standard now requires 36 billion gallons of renewable fuels by 2022.

In March 2011, President Barack Obama articulated his renewable fuel policy of reducing the US's dependence on oil by leveraging cleaner, alternative fuels and greater efficiency in his "Blueprint for a Secure Energy Future."

II. Regulations

A. The Regulatory Regime

I. Describe the Regulatory Regime that Applies to Oil and Gas Exploration and Production, Including the Key Legislation and Features of the Regime.

Oil and gas exploration and production are governed by regulations from the federal and state governments. The regulations depend on whether the surface location of the oil and gas is owned by the federal government, state government or by private individuals, and whether the location is onshore or offshore.

Generally, exploration and production activities on onshore federal lands are regulated by the:

- Mineral Leasing Act of 1920.
- Mineral Leasing Act for Acquired Lands of 1947.

Development of oil and gas on federal offshore property is handled by the Outer Continental Shelf Lands Act (OCSLA).

In addition, there are specific federal statutes relating to upstream oil and gas activities, such as the:

- Oil and Gas Royalty Management Act, which governs lease and royalty agreements.
- Petroleum Marketing Practices Act, which sets certain requirements for contracts between gasoline refiners or distributors and their retailers.

State laws and agencies, such as the Texas Natural Resources Code, the Colorado Oil and Gas Conservation Commission, and North Dakota's Industrial Commission, Oil and Gas Division, govern development, exploration, and production of oil and gas on state-owned and privately-owned lands.

B. Regulatory Bodies

I. Who Regulates the Extraction of Oil and Gas?

The extraction of oil and gas is regulated by the:

- DOI, which regulates the extraction of oil and gas from federal lands.

- Bureau of Land Management (BLM), which regulates oil development, exploration, and production on federal onshore properties.
- Bureau of Ocean Energy Management (BOEM) and the Bureau of Safety and Environmental Enforcement (BSEE), which manage offshore oil production operations.
- Office of Natural Resources Revenue (ONRR), which collects royalties for onshore and offshore production.
- Bureau of Indian Affairs (BIA), which, along with the BLM, regulates oil development of native Indian lands.
- Federal Energy Regulatory Commission (FERC), which regulates inter-state pipelines.
- DOE, which handles the Strategic Petroleum Reserve, conducts energy research, and gathers and analyses energy industry data.
- EPA, which provides oversight for environmental, health, and safety issues.

Each state has its own agencies that regulate the development, exploration, and production of oil and gas activities. These state agencies issue drilling permits and control pipeline transportation within state boundaries. Examples of these state agencies include the:

- Railroad Commission of Texas.
- California Department of Conservation's Division of Oil, Gas and Geothermal Resources.
- Pennsylvania Department of Environmental Protection's Office of Oil and Gas Management.

Some state utility departments handle pipeline transportation within state boundaries. Each state also has its own department regulating environmental, health, and safety issues arising from oil and gas operations.

See Section X.

III. Rights to Oil and Gas

A. Ownership

I. How Are Rights to Oil and Gas Held, and Who Holds Those Rights?

In the US, rights to oil, gas, and minerals are generally held by the owner of the surface until and unless these mineral rights are severed or assigned to others. Where the mineral estate has been severed from the surface estate, the mineral estate is dominant and the holder of the mineral estate is entitled to use the surface to the extent reasonably needed to explore and develop all minerals in the mineral estate.

Federal and state governments can also be owners of mineral estates, both onshore and offshore. Under the Submerged Lands Act, each coastal state owns the land extending three nautical miles (5.6 km) from the shore at mean low tide, and has jurisdiction to decide whether or not, and under what terms, to lease the area for oil and gas. Exceptions include Texas and the west coast of Florida, which for historical reasons, own the seabed out to approximately ten nautical miles (16 km) from the shore. The OCSLA provides federal jurisdiction for all offshore lands beyond the state limit. In 1983, a Presidential proclamation extended federal jurisdiction out to 200 nautical miles from shore, the boundary for the US Exclusive Economic Zone.

B. Nature of Oil and Gas Rights

I. What Are the Key Features of the Leases, Licences or Concessions Which Are Issued under the Regulatory Regime? Can These Rights Be Leased by the Right-Holder?

a. Lease/License/Concession Term

The rights to develop, explore, and produce oil and gas from lands owned by another are obtained through an oil and gas lease. Concessions and production sharing agreements associated with state oil companies are typically not used in the US. For federal lands, leases are awarded through periodic auctions held by the BLM (onshore) and the BOEM (offshore) (see Section III.B.2). Similar state agencies award leases for state-owned lands. Private owners of mineral rights negotiate their own leases.

Oil and gas leases typically have a primary term for a specified number of years (from one to ten years) and a conditional secondary term that is tied to the production life of the properties. Unless the operator drills wells or undertakes specific actions stated in the lease (or pays an additional fee instead of such actions) the lease may be subject to termination.

If oil and gas is being produced in paying quantities at the end of the primary term or the operator performs activities specified in the agreement, the lease continues into the second term for an indefinite period.

b. Fees

Required royalty payments are included in all oil and gas leases. A royalty rate is a defined fraction of the amount or value of the oil or gas removed or sold from the lease. A royalty of 1/8 of production was common for many years, but now rates vary lease by lease (3/16 or 1/6 are more common). For federal leases, the onshore royalty must not be less than 1/8 while offshore royalties are higher due to statutory requirements. While the rates can be determined by statute, the DOI and special legislation such as the Deep Water Relief Act may modify the standard terms of the lease to reduce the required royalty amount or suspend royalty payments. State and private leases have more flexibility in setting royalty rates and terms.

c. Liability

The typical drilling contract allocates certain risks (personal injury, damage to property, certain pollution risks, and consequential damages) on a reciprocal basis regardless of fault. Other risks, including well control, downhole pollution, and loss or damage to the hole or downhole tools, are usually assumed by the operator.

d. Restrictions

Any restrictions are negotiated by the parties as part of the lease.

2. How Are Such leases, Licences or Concessions Awarded?

The Mineral Leasing Act of 1920 (as amended) and the Mineral Leasing Act for Acquired Lands of 1947 (as amended) give the BLM responsibility for oil and gas leasing on about 570 million acres of federal and native American lands. The Federal Onshore Oil and Gas Leasing Reform Act of 1987 requires that all public lands that are available for oil and gas leasing be offered by competitive leasing on a quarterly basis. Non-competitive oil and gas leases can only be issued after the lands have been offered competitively at an oral auction and not received a bid. A Notice of Competitive Lease Sale must be published at least 90 days before the auction is held. On the day of the auction, the successful bidder must submit a properly executed lease and pay:

- A share of the sale costs (US\$150 per lease).
- The first year's advance rental (US\$1.50 per acre or fraction thereof).
- Not less than the US\$2 per acre minimum bonus bid.

The balance of the bonus bid must be received within ten working days of the auction. Before any surface drilling activities can take place, the lessee must furnish a bond of US\$10,000 to ensure compliance with all lease terms.

States have similar auctions for state lands, with the auctions handled by state agencies, such as the Texas General Land Office or Wyoming's Office of State Lands and Investments.

For private property, each mineral owner negotiates his own oil and gas lease.

3. What Payments, Such as Taxes or Royalties, Are Payable by Oil and Gas Interest Holders to the Government?

The Internal Revenue Service (IRS) is the principal taxing authority at the federal level, with the US Customs Service of the Department of the Treasury handling customs duties. State taxes are handled by a variety of agencies.

Federal tax regulations provide numerous special rules and deductions relating to the income taxes charged for exploration and production of oil and gas. Tax exceptions include expenditures relating to pre-drilling exploration costs, intangible drilling costs, accelerated depreciation of oilfield equipment and depletion of subsurface resources. See Section VII.A.

Federal and state excise taxes are collected on the retail sale of motor fuels, such as gasoline. Oil companies must pay state property taxes on real estate holdings and certain personal property and may be required to pay state sales and use tax on purchased personal items.

The Oil Spill Liability Trust Fund currently authorises an excise tax of US\$0.08 per barrel on petroleum produced in or imported to the US (see Section VII.B).

C. Transfer of Rights

I. How Are Oil and Gas Rights Transferred? Are There Any Restrictions on the Disposal of Interests?

The transfer of oil and gas rights varies for federal, state, and private leases and for onshore and offshore federal properties. With onshore federal leases, the BLM must approve any assignments. Assignments of offshore federal oil and gas leases and offshore pipeline rights of way must be approved by the BOEM. With the assignment, the new operator must provide a bond or sufficient collateral to secure performance and cover liabilities. Similar approvals from state agencies may be required for assignments of oil and gas leases involving state lands. Most private leases provide that the rights of the lessee may be assigned at any time.

IV. Transportation by Pipeline

A. What Regulatory Requirements Apply to the Construction and Operation of Pipelines?

FERC has sole responsibility for authorising the siting, construction, and operations of inter-state pipelines, natural gas storage fields and LNG facilities. Almost all applications to FERC for inter-state natural gas pipelines require co-ordination with other regulatory agencies such as the EPA and the Department of Transportation's Office of Pipeline Safety (OPS).

The EPA assists FERC and/or state authorities in determining if the environmental aspects of the project meet acceptable standards. FERC also provides environmental reviews under the National Environmental Policy Act (NEPA), the Endangered Species Act, the National Historic Preservation Act, and the Magnuson-Stevens Act.

The safe operation of oil pipelines is assured by extensive federal and state regulations. OPS governs the safety standards, procedures, and actual development and expansion of any pipeline system. The pipeline cannot begin operations until it is certified safe by OPS. OPS retains safety jurisdiction for the entire life of the pipeline.

Inter-state pipelines are regulated by the US Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA) under the Pipeline Safety Act of 1979. PHMSA develops and enforces regulations for the safe, reliable, and environmentally sound operation of the nation's 2.6 million mile pipeline transportation system and the nearly 1 million daily shipments of hazardous materials by land, sea, and air. PHMSA also regulates transmission and gathering lines and some low-stress pipelines.

Almost all hazardous liquid pipelines within state boundaries are now regulated by a state agency. States must follow the federal safety regulations in 49 Code of Federal Regulations Part 195, and state safety rules must be no less stringent than the federal rules.

The National Transportation Safety Board (NTSB) investigates pipeline accidents and makes recommendations for improvements in operations. Pipeline operations are also subject to regulation by the:

- EPA.
- Occupation Safety and Health Administration (OSHA).
- US Army Corps of Engineers.
- Various state public utility commissions and other state agencies.

B. Is There a System of Third Party Access to Pipelines and Other Infrastructure?

Access for developers of offshore oil and gas fields to upstream infrastructure for the In the US, pipelines are owned by individual pipeline companies who transport the oil or gas products to their customers. FERC requires that access to inter-state natural gas transportation and storage services must be provided on a non-discriminatory basis. Subject to a FERC-approved tariff, the pipeline company negotiates individual contracts with its customers seeking inter-state transportation services. The rates and terms charged cannot be unduly restrictive and must be fair to all parties. Contracts for transportation within state boundaries and the storage of natural gas are also privately negotiated.

V. Health, Safety and the Environment

A. Health and Safety

I. Describe the Health and Safety Regime that Applies to Oil and Gas Exploration and Extraction, and Transportation by Pipeline.

The Occupational Safety and Health Administration (OSHA), under the US Department of Labor and comparable state agencies, establishes and enforces rules that protect employees and workers from job-related injuries. OSHA has extensive record keeping requirements, including maintaining incident records for 30 years after the employee's service ends. In addition, OSHA requires inspections and safety programmes to investigate mechanical integrity of equipment, hazard analysis, and process safety. OSHA has the authority to issue citations for violations of its rules. Under the Hazard Communication Rule of OSHA, workers must be advised of the hazards of all chemicals used, produced, or stored at the work site.

The BSEE regulates and enforces safety rules on offshore oil and gas operations. The Chemical Safety Board (CSB) investigates accidental releases, including releases from oil and gas related operations, resulting in a fatality, serious injury or substantial property damages.

B. Flares and Vents

I. Are Flare and Vent Regulations in Place?

In April 2012, the EPA passed rules to address air emissions from oil and gas exploration, production, processing and transportation. Under the rules, oil and gas well operators are required to reduce air emissions from drilling and hydraulic fracturing.

Beginning in January 2015, the EPA will require that well operators use "green completions" (technologies that capture harmful emissions) to control air emissions. Until then, well operators are allowed to direct emissions to a combustion device (such as a flare). There are some exceptions to implementing green completions, including exploratory wells and certain low-pressure wells.

C. Environmental Impact Assessments (EIAs)

I. Is an EIA Required Before Extracting or Processing Oil and Gas?

Obtaining land use development permits, drilling permits, and operating permits may require the preparation of an EIA under the NEPA or under similar state statutes. NEPA, 42 USC. 4321 *et seq.*, establishes national environmental policy and goals for the protection, maintenance, and enhancement of the environment. The Council on Environmental Quality (CEQ) oversees NEPA.

NEPA requires federal agencies to incorporate environmental considerations into their planning and decision-making. The NEPA process consists of an evaluation of the environmental effects of a federal undertaking including its alternatives. There are three levels of analysis:

- Categorical Exclusion in which the undertaking is categorically excluded from a detailed environmental analysis if it meets certain criteria which a federal agency has previously determined as having no significant environmental impact.
- Environmental Assessment in which a federal agency prepares a written environmental assessment (EA) to determine whether or not a federal undertaking would significantly affect the environment. If the answer is no, the agency issues a finding of no significant impact (FONSI). If the answer is yes, then an environmental impact statement must be prepared.
- Environmental Impact Statement (EIS) in which a detailed evaluation of the proposed action and alternatives is made. The EIS must include discussions of the purpose of and need for the action, alternatives, the affected environment, and the environmental consequences of the proposed action. See Section V.C.2.

2. What Are the Different Stages of the EIA?

There a Permit Regime for Environmental Damage or Emissions If an EIS is prepared (see Section V.A.1) under NEPA, the draft is published in the *Federal Register*. For 45-days, the parties and any interested companies or individuals can comment on the proposed action. After a review of the comments, a final EIS is prepared and given a 30-day review period in the *Federal Register*. The final step is preparation of the Record of Decision (ROD) which includes a discussion of the decision, the alternatives considered, and mitigation plans. The ROD is a publicly available documents that can be viewed on the *Federal Register* or on the agency's website.

D. Environmental Permits

Generally, a new or modified exploration or development oil and gas operation requires several permits, including a local land use development permit, a drilling permit, and an operating permit. To obtain these permits, many projects require an EIA under NEPA or under similar state requirements. The procedure includes a public review period, which can be contentious. The permits must be obtained before beginning oil and gas exploration so that the operator can avoid lengthy delays, penalties, and injunctions.

E. Waste

I. What Are the Regulations on the Disposal of Waste Products Resulting from Oil or Gas Extraction or Processing?

There are a number of federal and state statutes that are not limited to the oil and gas industry which must be adhered to in the exploration and development of energy resources:

- The Endangered Species Act prohibits activities that might harm the habitats of threatened and endangered species, such as darter fish, prairie chickens, and sagebrush lizards.
- The Fishery Conservation and Management Act and the Marine Mammal Protection Act protect ocean life.
- The Migratory Bird Treaty Act protects migratory birds, their nests, and eggs.
- The National Marine Sanctuaries Act protects certain sea areas.
- The National Historical Preservation Act of 1966, the American Antiquities Act of 1906, the Archaeological Resources Protection Act of 1979, and the Abandoned Shipwreck Act of 1987 govern certain historical and archaeological sites.

In general, federal and state laws relating to environmental, health and safety concerns are not oil and gas industry-specific but are impact oriented. These include:

- The Solid Waste Disposal Act and its 1976 amendments, known as the Resource Conservation and Recovery Act (RCRA), which regulate and manage the disposal of solid waste and hazardous material waste.
- The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), which regulates the clean-up of contaminated sites.
- The Clean Air Act (CAA), which governs air emissions.
- The Clean Water Act (CWA) and the Safe Drinking Water Act (SDWA), which protects surface and drinking water.

The principal enforcement agency is the EPA, with state agencies enforcing similar state laws and delegated powers from the EPA, subject to EPA oversight.

Some statutes focus on the oil and gas sector. The EPA has issued water-use guidelines relating to upstream and downstream oil operations and to the discharge of oil into navigable waterways under the CWA. The Oil Pollution Act (OPA), which is an amendment to the CWA, covers clean-up and damage assessments relating to large oil spills into navigable waters, shorelines, and the exclusive economic zone. The CWA:

- Establishes water quality standards.
- Prohibits pollution.
- Sets up a system of water discharge permits, and enforces its regulations with strict penalties.

State regulatory agencies generally govern bodies of water falling within state boundaries and groundwater.

a. Hydraulic fracturing

Hydraulic fracturing which has been used in the US for decades, involves the injection of highly pressurised water, fluids, and proppants into shale or other non-porous hydrocarbon formations in order to increase production from oil and natural gas wells. Recently, hydraulic fracturing has received increased scrutiny from the media, the EPA, Congress, environmental and citizens groups, and state and local regulatory agencies. Concerns have been raised about the large volumes of water used in the process, the alleged contamination of aquifers that supply drinking water, and the appropriate disposal or recycling of the flowback fluids. At the heart of these concerns are the additives used in fracturing fluids, which some argue contain potentially toxic substances such as benzene, toluene, xylene, and methanol.

Currently hydraulic fracturing is not regulated by the federal government, but proposed statutes and rules from various federal agencies are making their way through the legislative process. The EPA has drafted guidelines relating to obtaining an Underground Injection Control (UIC) permit where diesel fuel is used as a fracturing fluid. The EPA has also issued regulations aimed at reducing toxic air pollution from hydraulic fracturing operations and emissions from compressors and oil storage tanks. Under these regulations,

operators of fractured and re-fractured wells may use flaring until 1 January 2015, after which "green completions" (technologies that capture harmful emissions) must be used.

In May 2012, the BLM proposed new rules and standards for fractured wells on roughly 756 million acres of public and Indian lands. These proposed rules include new guidelines for casing wells, and require that:

- All chemicals used in hydraulic fracturing be publicly disclosed on completion of hydraulic fracturing.
- Water management and disposal plans be submitted and approved before drilling.

At the state level, hydraulic fracturing is regulated through oil and gas well permitting and integrity rules. Some states require permits to be issued before hydraulic fracturing can be used. One state (Vermont) has a complete ban on hydraulic fracturing while other states (New York and Maryland, among others) have moratoria on using hydraulic fracturing.

b. Disclosure of Hydraulic Fracturing Chemicals

The hydraulic fracturing process produces large volumes of fluids called "flowback" or "produced water". Most operators engaged in hydraulic fracturing dispose of their flowback by either injecting the fluids into a well called a "Class II permit well," treating the water and disposing of it, or treating and recycling the water. Flowback is exempt from RCRA's hazardous waste regulations, but is subject to state regulation protect surface and ground water. As natural waterways cannot assimilate the flowback, municipal domestic wastewater treatment plants are not designed to process flowback, and industrial treatment plants have limited capacity, the EPA plans to develop (by 2014) Clean Water Act regulations to require pre-treatment of flowback before it is sent to publicly owned treatment plants.

In April 2011, a Congressional energy committee concluded that the chemicals used in hydraulic fracturing were not widely disclosed. The FracFocus website (<http://fracfocus.org>) was launched by two environmental groups to provide the public with objective information on hydraulic fracturing, the chemicals used, the purposes they serve, and the means by which groundwater is protected. The BLM (*see above*) has proposed rules requiring the disclosure of hydraulic fracturing fluids used on federal lands.

Currently there are 18 states (Arkansas, Colorado, Idaho, Indiana, Louisiana, Michigan, Montana, New Mexico, North Dakota, Ohio, Oklahoma, Pennsylvania, South Dakota, Tennessee, Texas, Utah, West Virginia, and Wyoming) that have disclosure regulations in force while several others (California, Illinois, and Massachusetts) are working on regulations. Several states require disclosures to be made public on the FracFocus.org website; while others require disclosure only to state agencies. The level of disclosure often depends on the extent to which the state allows trade secret protections.

c. Transportation

The US Department of Transportation administers pipeline regulations through the Office of Pipeline Safety (OPS) within the PHMSA (see Section IV.A).

F. Decommissioning

I. What Are the Decommissioning Obligations and Liabilities that Arise?

Plans for decommissioning facilities, wells, pipelines, and platforms on federal outer continental shelf lands must be approved by the BSEE. For onshore leases on federal lands, the BLM requires operators to submit a bond in an amount sufficient to ensure compliance with applicable regulations relating to the plugging of wells and the reclamation and restoration of the land and surface water that were adversely affected by the drilling. Decommissioning of oil and gas facilities on state and private lands is generally addressed in the lease.

VI. Sale and Trade

A. How Is Trade in Oil and Gas Usually Completed?

The majority of oil and gas is sold on the open market in the form of futures contracts in which one party agrees to deliver a certain amount of oil or gas to another party at an agreed-upon date for a set price. Oil and gas are also traded on regulated commodities exchanges, in which they are bought and sold on standard contracts.

B. Are Oil and Gas Prices Regulated?

Crude oil is an international commodity, and its price is determined by international supply and demand. Federal and state governments do not regulate the price of crude oil or refined products.

The Natural Gas Wellhead Decontrol Act of 1989 (NGWDA) deregulated natural gas prices at the wellhead, effective as of 1 January 1993, and the price of natural gas is now set by the market.

VII. Tax

A. What Are the Main Tax Issues Arising on Oil and Gas Works?

In the US, domestic companies are subject to income tax on their worldwide income, including income from foreign branches, at a rate of 35%. Income of foreign corporations from US sources that is not subject to withholding tax or treaty protection are also subject to income tax at 35%. This rate applies to oil and gas activities and non-oil and gas activities.

Severance taxes are payable to the state where the oil or gas is extracted, including onshore and offshore state waters. The tax rates and the tax base vary from state-to-state.

Calculations may be based on a flat amount per volume produced or as a percentage of gross receipts. Generally, different taxes rates are applied to different products. See Section III.B.3.

B. What Taxes and Duties Apply on Import and Export of Oil and Gas?

The Oil Spill Liability Trust Fund provisions of the Oil Pollution Act (OPA) imposes a per-barrel excise tax, collected from the oil industry on petroleum produced in or imported to the US. The Energy Improvement and Extension Act of 2008 extended the per-barrel excise tax through December 2017 and increased the per-barrel excise tax from US\$0.05 to US\$0.08 for 2009 to 2016 and to US\$0.09 for 2017.

Tariffs on oil imports range from US\$0.0525 to US\$0.525 per barrel depending on the type of petroleum. Oil and petroleum products from some countries are duty-free due to trade agreements and Congressional programmes.

VIII. Enforcement of Regulation

A. What Are the Regulator's Enforcement Powers?

The EPA enforces environmental laws to protect human health and the environment and, when warranted, will take civil or criminal enforcement action. Many environmental laws allow the EPA to authorise state agencies to conduct enforcement activities. The EPA and the states generally identify facilities that are violating the regulations through compliance monitoring.

The EPA can respond to a violation with:

- An informal notification to the violator of its non-compliance and request that it come into compliance without any further formal action.
- A formal administrative enforcement action in which the EPA issues an administrative order to compel compliance, and in many instances imposing a monetary penalty for past infractions.
- A formal civil/judicial enforcement in which the EPA, through the US Department of Justice, can initiate a civil lawsuit in the federal courts against a violator. Penalties of up to US\$37,500 per violation per day and injunctive relief may be imposed.
- A criminal enforcement in which a criminal lawsuit may be initiated for egregious conduct. The violator may be imprisoned.

In determining what enforcement option to take, the EPA will evaluate the severity and duration of the violation, and the past compliance history of the violator. However, most violations will be the subject of administrative enforcement proceedings (where the statute violated makes these available).

State regulatory agencies have similar enforcement powers.

B. Is There a Right of Appeal Against the Regulator's Decisions?

The US Supreme Court has held that an EPA administrative compliance order under the Clean Water Act is subject to judicial review under the Administrative Procedure Act. The alleged violator can bring a lawsuit against the EPA in federal court to have the order reviewed.

Court orders issued under the civil or criminal enforcement actions are appealable in accordance with the Federal Rules of Civil Procedure to the US Courts of Appeal.

State agency decisions may be appealed to state courts with jurisdiction over those decisions.

IX. Reform

A. Are There Plans for Changes to the Legal and Regulatory Framework?

Federal and state governments and agencies are constantly updating, re-writing, and promulgating new rules and statutes related to the oil and gas industry. The most recent regulations concern hydraulic fracturing. See Section V.E.1.a. With citizens polarised about the safety and efficacy of hydraulic fracturing, it is anticipated that this process will remain in the regulatory forefront of legislatures and agencies throughout the US.

X. The Regulatory Authorities

A. Environmental Protection Agency

Address. Ariel Rios Building, 1200 Pennsylvania Avenue NW, Washington DC 20460
T +1 202 272-0167
W www.epa.gov

Main responsibilities. The EPA has primary responsibility for enforcing many of the environmental statutes and regulations of the US.

B. Bureau of Land Management

Address. 1849 C Street NW, Rm 5665, Washington DC 20240
T +1 202-208-3801
F +1 202-208-5242
W www.blm.gov

Main responsibilities. The BLM manages vast stretches of public lands that have the potential to make significant contributions to the US' renewable energy portfolio. The BLM also manages federal onshore oil, gas and coal operations that make significant contributions to the domestic energy supply as the US transitions to a clean energy future.

C. Bureau of Safety and Environmental Enforcement

Address. 1849 C Street NW, Washington DC 20240

W www.bsee.gov

Main responsibilities. BSEE works to promote safety, protect the environment, and conserve offshore resources through regulatory oversight and enforcement.

D. Bureau of Ocean Energy Management

Address. 1849 C Street NW, Washington DC 20240

T +1 202 208-6474

W www.boem.gov

Main responsibilities. The BOEM manages the exploration and development of the nation's offshore resources. It seeks to appropriately balance economic development, energy independence, and environmental protection through oil and gas leases, renewable energy development and environmental reviews and studies.

E. Federal Energy Regulatory Commission

Address. 888 First Street NE, Washington DC 20426

T +1 202 502-6088 (Toll-free: +1 866 208-3372)

W www.ferc.gov

Main responsibilities. FERC is an independent agency that regulates the inter-state transmission of electricity, natural gas, and oil. FERC also reviews proposals to build LNG terminals and inter-state natural gas pipelines as well as licensing hydropower projects.

F. Pipeline and Hazardous Materials Safety Administration

Address. East Building, 2nd Floor, 1200 New Jersey Ave SE, Washington DC 20590

T +1 202 366-4433

F +1 202 366-3666

W www.phmsa.dot.gov

Main responsibilities. PHMSA's mission is to protect people and the environment from the risks inherent in transportation of hazardous materials, including oil and gas.

XI. Online Resources

W www.epa.gov/lawsregs/enforcement/index.html

Description. EPA's website provides official, up-to-date information and links to the laws and regulations falling under the EPA's authority.

W www.ferc.gov/legal/fed-sta.asp

Description. FERC's website provides official, up-to-date information and links to the statutes covering environmental reviews and protection, financial reporting, information technology reporting, and historic preservation.

W www.phmsa.dot.gov/regulations

Description. This official, up-to-date website identifies and gives links to the statutes and regulations that PHMSA enforces.