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SPILLING SECRETS: TRADE SECRET DISCLOSURE AND TAKINGS IN OFFSHORE DRILLING REGULATION

By Michael A. Greene∗


I. INTRODUCTION

[1] Deepwater offshore drilling presents a clash of competing interests that raises legal questions of some novelty. The government and the public possess a significant interest in obtaining access to geological information about potential drilling sites, and the proposed techniques for exploiting the accompanying mineral rights, in order to maintain safety, health, and the environment. On the other hand, companies engaged in offshore drilling possess a strong and legitimate interest in protecting

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1 See generally The Big Picture: Why Is It So Hard to Stop the Oil Gusher, and Why Was Such Extreme Deepwater Drilling Allowed in the First Place?, WASHINGTON’S BLOG (May 23, 2010), http://www.washingtionsblog.com/2010/05/big-picture-why-was-deepwater-drilling.html [hereinafter The Big Picture] (showing that BP never disclosed the “detailed geological information, maps and drawings” of its drill site to the federal government, which might have prevented the drilling before it began).
proprietary information, which is intrinsic to their ability to compete.\(^2\) For example, disclosure of valuable information regarding a potential offshore oil reservoir could entice competitors to drill and deplete the same reservoir from a slightly removed location, resulting in the loss of billions of dollars of revenue.

[2] The events of the Deepwater Horizon offshore drilling and blowout response highlight the risks to public safety, health, and the environment of nondisclosure of industry data.\(^3\) Reports suggest that responsible parties withheld critical information regarding the structure of the ocean floor at the Deepwater Horizon drilling site from regulating agencies.\(^4\) Furthermore, past spill response drills have led federal officials to complain of inadequate industry disclosure to government representatives, motivated in part by industry’s desire to protect

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\(^4\) Evidence shows the geologic structure of deepwater petroleum sites in the Gulf of Mexico to be comprised of porous and tectonically active salt sheets – a critical parameter to determining effective methods of capping the blowout – yet reports suggest BP did not provide regulating agencies with such information. *The Big Picture*, supra note 1; *Top Expert: Geology Is “Fractured”, Relief Wells May Fail … BP is Using a “Cloak of Silence”, Refusing to Share Even Basic Data with the Government*, WASHINGTON’S BLOG (Aug. 19, 2010), http://georgewashington2.blogspot.com/2010/08/top-oil-expert-geology-is-fractured-bp.html.
proprietary information.\(^5\) In addition to its contribution to problems in the Gulf, inadequate information sharing has also hamstrung federal regulators tasked with overseeing offshore drilling operations in Alaska.\(^6\)

[3] This Article will explore whether the law may require the disclosure of adequate proprietary information to enable effective regulation. Part II will discuss the settled law regarding the property status of trade secrets, the regulatory takings doctrine, the applicability of the Takings Clause of the United States Constitution to proprietary data, and the exactions doctrine. Part III will explore the validity of the mandatory submission of proprietary health, safety, and environmental data to government regulators, with the guarantee that such data will be kept secret from competitors and the public. Part IV will then explore the validity of regulation mandating public disclosure of such proprietary information, and will discuss the implications for regulation of deepwater drilling. Finally, Part V will discuss the implications of the exactions doctrine for the validity of regulation requiring public disclosure of proprietary health, safety, and environmental data, as viewed through the lens of land use.

II. **TAKINGS CLAUSE PROTECTION FOR PROPRIETARY DATA**

   A. Trade Secrets as Property Rights

[4] The threshold question in any evaluation of the constitutionality of mandatory disclosure of trade secret information is whether that


\(^6\) U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-10-276, *OFFSHORE OIL AND GAS DEVELOPMENT ADDITIONAL GUIDANCE WOULD HELP STRENGTHEN THE MINERALS MANAGEMENT SERVICE’S ASSESSMENT OF ENVIRONMENTAL IMPACTS IN THE NORTH ALEUTIAN BASIN* (2010) (decrying selective sharing of information on a need-to-know basis within the MMS agency in the Alaska Outer Continental Shelf region as preventing agency officials from obtaining access to the very reports from which they were required to produce environmental impact assessments).
information constitutes property. Trade secret protection was originally a common law doctrine with vague definitional boundaries, and much of that common law nature persists today. For example, trade secret protection requires no governmental registration, one of its principal attractions compared to other types of intellectual property. In its 1984 decision of Ruckelshaus v. Monsanto Co., the United States Supreme Court granted recognition to trade secrets as property for Takings Clause purposes.

Mindful of precedent mandating that property interests must stem from a source independent of the Constitution, such as state law, the Court held trade secrets recognized as property by relevant state law will be afforded constitutional protection. Thus, the starting point when evaluating the validity of potential regulation of offshore oil drilling is

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9 See Rowe, supra note 8, at 1432.

10 See Monsanto, 467 U.S. at 1003-04.

11 See Monsanto, 467 U.S. at 1001, 1003-04; Webb’s Fabulous Pharmacies, Inc. v. Beckwith, 449 U.S. 155, 161 (1980) (“Property interests . . . are not created by the Constitution. Rather, they are created and their dimensions are defined by existing rules or understandings that stem from an independent source such as state law . . . .” (quoting Bd. of Regents v. Roth, 408 U. S. 564, 577 (1972))); see also Pruneyard Shopping Ctr. v. Robins, 447 U.S. 74, 84 (1980) (“Nor as a general proposition is the United States, as opposed to the several States, possessed of residual authority that enables it to define ‘property’ in the first instance.”); Chevron Chem. Co. v. Costle, 641 F.2d 104, 114-15 (3d Cir. 1981) (holding property rights must be established by some state law because “[t]he common law is not a brooding omnipresence in the sky but the articulable voice of some sovereign or quasi-sovereign that can be identified . . . .” (quoting S. Pac. Co. v. Jensen, 244 U.S. 205, 222 (1917) (Holmes, J., dissenting)).
analyzing each regulated company’s trade secret protection as granted under state law.\textsuperscript{12} If the relevant state provides no trade secret protection for the type of health, safety, and environmental data at issue, further takings analysis is unnecessary.\textsuperscript{13}

[6] Trade secrets are protected in every state in one form or another.\textsuperscript{14} The vast majority of states – governing the overwhelming majority of United States corporations – have enacted the Uniform Trade Secret Act (“UTSA”), which clearly defines the types of proprietary data at issue as protectable trade secrets.\textsuperscript{15} Among states that have not enacted the UTSA, Texas is a particularly interesting example, both because of its proximity to the Gulf of Mexico and because federal agencies have held the Texas corporation BP Exploration & Production, Inc. (“BP E&P”) a Responsible Party for the Deepwater Horizon cleanup.\textsuperscript{16} Though the Texas legislature

\textsuperscript{12}See Monsanto, 467 U.S. at 1001.

\textsuperscript{13}See id. at 1001, 1014.

\textsuperscript{14}ROBERT P. MERGES ET AL., INTELLECTUAL PROPERTY IN THE NEW TECHNOLOGICAL AGE 35 (5th ed. 2010).

\textsuperscript{15}See UNIF. TRADE SECRETS ACT § 1(4)(i) (1985) (defining a trade secret as “information, including a formula, pattern, compilation, program, device, method, technique, or process that: (i) derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and (ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.”); MERGES, supra note 14, at 36 (stating that forty-four states and the District of Columbia have enacted the UTSA). Note that Delaware, by far the most popular legal domicile for corporations, has adopted the UTSA. See DEL. CODE ANN. tit. 6, §§ 2001 to 2009 (2011); Mohsen Manesh, Delaware and the Market for LLC Law: A Theory of Contractibility and Legal Indeterminacy, 52 B.C. L. REV. 189, 190, 195-96 & 196 nn.30-31 (2011) (“A majority of publicly traded companies and sixty percent of the Fortune tune [sic] 500 are incorporated in Delaware. No other state even approaches Delaware’s market share.”) (footnotes omitted).

\textsuperscript{16}Notice of Intent to Conduct Restoration Planning (Pursuant to 15 C.F.R. Section 990.44) – Discharge of Oil from the Deepwater Horizon Mobile Offshore Drilling Unit and the Subsea Macondo Well Into the Gulf of Mexico, NOAA & NAT’L RES. TRS. (Apr. 20, 2010), http://www.darrp.noaa.gov/southeast/deepwater_horizon/pdf/Deepwater_Horizon_Final_NOL.pdf (holding BP Exploration & Production Inc. a responsible party for purposes of the Deepwater Horizon cleanup); Letter from Susan Combs, Tex.
has spurned the UTSA, Texas courts nonetheless apply the Restatement of Torts definition of trade secrets, which clearly defines confidential competitive data as a trade secret.\textsuperscript{17} Thus, like Monsanto’s proprietary health, safety and environmental data, a deepwater oil company’s proprietary geological data would likely be protected by state law under either the UTSA or the Restatement definition of trade secret, and are further protected by the Takings Clause of the United States Constitution.\textsuperscript{18}

B. Takings and the Regulatory Takings Doctrine

[7] Where an act of government conveys title to an interest in property from the owner to the public, the Takings Clause states that the owner must receive “just compensation.”\textsuperscript{19} This is the ordinary takings doctrine, which applies whether the interest conveyed is full title or merely an easement.\textsuperscript{20} By contrast, where regulation does not convey an interest but

\textsuperscript{17} See Hyde Corp. v. Huffines, 314 S.W.2d 763, 776 (Tex. 1958) (adopting the Restatement definition of trade secrets); Parker Barber & Beauty Supply, Inc. v. Wella Corp., No. 03-04-00623-CV, 2006 Tex. App. LEXIS 8841, at *50 n.19 (Oct. 11, 2006) (“Texas courts continue to follow the definition of trade secrets, as well as the six factors used to identify a trade secret, set forth in section 757 of the original Restatement of Torts . . . .”); see also RESTATEMENT (FIRST) OF TORTS § 757 cmt. b (1939) (defining a trade secret as “any formula, pattern, device or compilation of information which is used in one’s business, and which gives him an opportunity to obtain an advantage over competitors who do not know or use it,” and which is in fact secret); Hudson, supra note 16, at 110-11.


\textsuperscript{19} U.S. CONST. amend. V (prohibiting the taking of “private property . . . for public use, without just compensation”).

\textsuperscript{20} See, e.g., Dolan v. City of Tigard, 512 U.S. 374, 384 (1994) (“Without question, had the city simply required petitioner to dedicate a strip of land . . . for public use, rather than conditioning the grant of her permit to redevelop her property on such a dedication,
merely restricts the use an owner may make of his or her property, courts apply the regulatory takings doctrine.\(^\text{21}\)

[8] The regulatory takings doctrine provides the basis for determining the validity of land-use regulations using the three famous \textit{Penn Central} factors: (i) “the economic impact of the regulation on the claimant[;]” (ii) interference with reasonable “investment backed expectations[;]” and (iii) “the character of the governmental action.”\(^\text{22}\) Assumed in such cases is that government must occasionally diminish the value of private property in furthering the public interest.\(^\text{23}\) But where such reductions are so severe as to be tantamount to a direct appropriation or an ouster, the regulatory takings doctrine acts “to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole.”\(^\text{24}\)

[9] Trade secrets protected under state law are also protected under the Takings Clause of the United States Constitution, though they are not land.\(^\text{25}\) Public disclosure of a trade secret constitutes the destruction of its...


\(^{22}\) \textit{Penn Central}, 438 U.S. at 124; \textit{see Monsanto}, 467 U.S. at 1005.

\(^{23}\) \textit{Pa. Coal}, 260 U.S. at 413 (“Government hardly could go on if to some extent values incident to property could not be diminished without paying for every such change in the general law.”).

\(^{24}\) \textit{Armstrong v. United States}, 364 U.S. 40, 49 (1960); \textit{see Lingle v. Chevron U.S.A., Inc.}, 544 U.S. 528, 537 (2005) (“[G]overnment regulation of private property may, in some instances, be so onerous that its effect is tantamount to a direct appropriation or ouster . . . such ‘regulatory takings’ may be compensable under the \textit{Fifth Amendment}.”).

\(^{25}\) \textit{See} U.S. CONG. amend. V; \textit{Monsanto}, 467 U.S. at 1003-04.
owner’s entire property interest in that trade secret, and thus forced
disclosure – far beyond being a mere use restriction upon that property –
would seem to implicate the ordinary takings doctrine. Nonetheless, the
United States Supreme Court in Monsanto evaluated regulations requiring
such public disclosure within the regulatory takings framework, much as it
has evaluated the validity of restrictions upon the use of land.

C. Exactions Doctrine

Where government entities condition the grant of a requested
government permit or benefit upon the conveyance of a private property
right to the public, the exactions doctrine is implicated. The purpose of
the exactions doctrine is to prevent the government from exploiting an
individual’s chance need for a government permit to unfairly accomplish
an uncompensated condemnation of property.

1. Nollan v. California Coastal Commission and the Essential Nexus

In its landmark 1987 decision in Nollan v. California Coastal
Commission, the United States Supreme Court first introduced the
“essential nexus” requirement when evaluating exactions. In Nollan, the
California Coastal Commission conditioned the approval of a
homeowner’s building permit petition upon the homeowner allowing the

26 See Unif. Trade Secrets Act § 1(4)(ii) (providing a definitional requirement that
trade secrets be subject to reasonable attempts to maintain secrecy); Monsanto, 467 U.S.
at 1002 (“If an individual discloses his trade secret to others who are under no obligation
to protect the confidentiality of the information, or otherwise publicly discloses the
secret, his property right is extinguished.”).

27 See Monsanto, 467 U.S. at 1005, 1016; see also Kaiser Aetna v. United States, 444
U.S. 164, 174 (1979); Penn Central, 438 U.S. at 124.

28 See Dolan v. City of Tigard, 512 U.S. 374, 386-87 (1994); see also Nollan v. Cal.

29 See Dolan, 512 U.S. at 383-84; Nollan, 483 U.S. at 841-42; Armstrong v. United
States, 364 U.S. 40, 49 (1960).

30 Nollan, 483 U.S. at 837.
public a lateral easement across its beachfront property, to connect one public beach with another.\textsuperscript{31} The Commission based its exaction upon a finding that the proposed building plan would inhibit the public’s view and awareness of the public beach from the street, pursuant to a California statute authorizing the restricting of building projects that “have an adverse impact on public access to the sea.”\textsuperscript{32} The state Superior Court nullified the Commission’s action, finding that the Commission lacked statutory authority for its actions.\textsuperscript{33} The California Court of Appeal, however, reversed the Superior Court’s statutory interpretation, upholding the Commission’s authority to condition its grant of the building permit and finding no constitutional infirmity in such action.\textsuperscript{34}

[12] The United States Supreme Court reversed the California courts, finding the Commission’s exaction an unconstitutional exercise of government authority.\textsuperscript{35} In so doing, the Court introduced the exactions doctrine.\textsuperscript{36} Put succinctly, the Court ruled that to be valid an exaction must function as a substitute for a valid prohibition.\textsuperscript{37} This imposes two conditions: first, the government must have had the ability to constitutionally prohibit the proposed building plan outright, due to the proposed building plan’s impact.\textsuperscript{38} Second, the exaction the government requires must accomplish the same purpose as the prohibition for which it substitutes, or put another way, must be designed to mitigate the same

\textsuperscript{31} Id. at 828.

\textsuperscript{32} Id. at 829.

\textsuperscript{33} See id. (noting the Superior Court interpreted the statute in part to avoid difficult issues of constitutionality, which turned out to be quite prescient).

\textsuperscript{34} Id. at 830-31.

\textsuperscript{35} See id. at 841-42.

\textsuperscript{36} See Nollan, 483 U.S. at 837, 848.

\textsuperscript{37} See id. at 837.

\textsuperscript{38} See id at 836-37.
impacts of the building proposal that the prohibition would address.\textsuperscript{39} This is the “essential nexus” requirement.\textsuperscript{40}

[13] In the Nollans’ case, the Commission possessed the constitutional authority to deny the building permit petition proposal outright, or so the Court assumed, in order to protect the view of the ocean for passersby on the street.\textsuperscript{41} The second prong, however, is where the Commission’s exaction failed.\textsuperscript{42} The Court stated that an exaction of a viewing spot on the Nollans’ property to the public beach would have been valid, preserving the view of and access to the beach from the street.\textsuperscript{43} It also intimated that an easement traversing the property from the street to the beach may not have suffered the same infirmity as the lateral easement.\textsuperscript{44} In requiring a \textit{lateral} easement \textit{across} the Nollans’ property, however, the exaction failed to accomplish the same purpose as a prohibition on building.\textsuperscript{45} In short, the exaction failed to function as a substitute for a prohibition.\textsuperscript{46}

\textsuperscript{39} See id. at 836-37.

\textsuperscript{40} See id. at 837.

\textsuperscript{41} See id. at 835-36 (“The Commission argues that among these permissible purposes are protecting the public’s ability to see the beach . . . . We assume, without deciding, that this is so—i.e., in which case the Commission unquestionably would be able to deny the Nollans their permit outright if their new house . . . would substantially impede these purposes, unless the denial would interfere so drastically with the Nollans’ use of their property as to constitute a taking.”).

\textsuperscript{42} See Nollan, 483 U.S. at 839.

\textsuperscript{43} See id. at 836 (“[T]he condition would be constitutional even if it consisted of the requirement that the Nollans provide a viewing spot on their property for passersby with whose sighting of the ocean their new house would interfere.”).

\textsuperscript{44} See id. at 836, 838, 840 (“It is quite impossible to understand how a requirement that people already on the public beaches be able to walk across the Nollans’ property reduces any obstacles to viewing the beach created by the new house.”).

\textsuperscript{45} See id.

\textsuperscript{46} See id. at 836-37.
2. *Dolan v. City of Tigard* and Rough Proportionality

[14] The Supreme Court further developed the exactions doctrine in its 1994 decision in *Dolan v. City of Tigard.*\(^47\) In *Dolan,* a hardware store owner petitioned the city for a building permit to expand her store, which would double the size of the store and pave a parking lot.\(^48\) Her property was adjacent to a creek, and part of her property was within the creek’s 100-year floodplain.\(^49\) The City Planning Commission conditioned its approval of Dolan’s petition upon the dedication of the floodplain portion of her property for an improved storm drainage system, and a further dedication to the public of a strip of adjacent land for a bicycle and pedestrian passageway.\(^50\) The Commission cited a finding of increased traffic congestion due to the proposed development, as well as increased burden on the creek’s ability to handle storm water runoff resulting from the additional proposed water-resistant paved surfaces.\(^51\) Thus, the Commission followed the teachings of the Court in *Nollan,* finding the essential nexus between the impacts of the proposed building and the exacted dedication designed to address the traffic and runoff problems.\(^52\) Accordingly, the Oregon Supreme Court upheld the constitutionality of the Commission’s action under *Nollan.*\(^53\)

\(^47\) *See* Dolan v. City of Tigard, 512 U.S. 374, 391 (1994).

\(^48\) *See id.* at 379.

\(^49\) *See id.* *See generally* 18 C.F.R. § 1304.412 (2009) (“100-year floodplain means that area inundated by the one percent annual chance (or 100-year) flood.”); ROBERT R. HOLMES, JR. & KAREN DINICOLA, 100-YEAR FLOOD-IT’S ALL ABOUT CHANCE: U.S. GEOLOGICAL SURVEY GENERAL INFORMATION PRODUCT 106 (2010), *available at* http://pubs.usgs.gov/gip/106A (defining a 100-year floodplain as an area inundated by the one percent annual chance flood, the so-called “100-year flood”).

\(^50\) *See Dolan,* 512 U.S. at 380.

\(^51\) *Id.* at 381-82.


\(^53\) *See Dolan,* 512 U.S. at 383; *Nollan,* 483 U.S. at 836-37.
The United States Supreme Court, nonetheless, struck down the Commission’s actions as unconstitutional. The Court stated the relation that the exacted dedication must bear to the impacts of the proposed development must constitute not only a nexus, but be related “both in nature and extent.” The Court clarified that “[n]o precise mathematical calculation is required[,]” but there must be an individualized showing of rough proportionality. In the case at bar, the Commission had found that the burdens of the proposed development and the exaction imposed were related, but had made no showing as to the degree of burden proposed nor the degree of relief afforded by the exacted remedy.

Thus, in Dolan the Supreme Court clarified its exactions jurisprudence, specifying that for exactions to be valid the exacted dedication to the public must not only function as a substitute for prohibiting the proposed development, but its remedial effect must be “roughly proportional” to the impact of the proposed development.

3. Purely Regulatory Versus Adjudicatory Action

It is potentially significant that both the Nollan and the Dolan decisions involved the adjudicatory action of government agencies, rather than pure legislative rulemaking. Both cases involved exactions imposed by city commissions in individually adjudicating a petition for a building permit. Justice Rehnquist emphasized this adjudicatory nature

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54 See Dolan, 512 U.S. at 382-83, 396.
55 Id. at 391.
56 Id.
57 Id. at 395-96.
58 Id. at 391 (internal quotation marks omitted); see Nollan, 483 U.S. at 836-37.
60 See Dolan, 512 U.S. at 385; Nollan, 483 U.S. at 828-29.
in his opinion for the Court in *Dolan*. 61 Justice Rehnquist distinguished land-use regulations judged under the regulatory takings doctrine that are “essentially legislative determinations classifying entire areas of [a] city[,]” from the individualized determinations and dedications the city commissions exacted in *Nollan* and *Dolan*. 62 The Court clearly turned a mistrustful eye toward individualized exactions as being inherently more suspect of government usurpation, and requiring greater judicial scrutiny. 63

4. Application of Exactions Doctrine to Trade Secrets

[18] The distinction between adjudicatory and purely legislative actions in the exactions analysis is of paramount importance to evaluating the application of the exactions doctrine to deepwater drilling regulation. The distinction between regulation of land use versus non-land use also is significant. Courts have not yet addressed whether an exaction of trade secrets may be controlled by the exactions doctrine. 64 As such, the legality of mandatory disclosure of proprietary data will be analyzed in Parts II and IV through the regulatory takings framework as expounded in

61 See *Dolan*, 512 U.S. at 385.

62 Id.

63 See id. at 387 (describing the Coastal Commission action in *Nollan* as “gimmickry”); *Nollan*, 483 U.S. at 841 (“We are inclined to be particularly careful about the adjective [i.e., the substantial advancing of a legitimate state interest] where the actual conveyance of property is made a condition to the lifting of a land-use restriction, since in that context there is heightened risk that the purpose is avoidance of the compensation requirement, rather than the stated police-power objective.”); see also *San Remo Hotel L.P. v. San Francisco*, 41 P.3d 87, 105 (Cal. 2002) (“The ‘sine qua non’ for application of *Nollan/Dolan* scrutiny is thus the ‘discretionary deployment of the police power’ in ‘the imposition of land-use conditions in individual cases.’”) (citation omitted); Action Apartment Ass’n v. Santa Monica, 82 Cal. Rptr. 3d 722, 732 (Cal. Ct. App. 2008) (“Both the United States and California Supreme Courts have explained the two part *Nollan/Dolan* test developed for use in land exaction takings litigation applies only in the case of individual adjudicative permit approval decisions; not to generally applicable legislative general zoning decisions.”).

the *Monsanto* decision. This Article will return to the exactions doctrine and viewing the mandatory disclosure of trade secrets through the land use lens in Part V.

III. Legality of Mandatory Disclosure to Government Agencies

[19] Where statutes or regulations expressly grant prohibitions of public disclosure, the government is clearly within its right to demand health, safety, and environmental data from private industry, notwithstanding the proprietary nature of that information.65 First principles of trade secret doctrine as well as judicial opinion uphold the validity of such mandatory submission requirements.66 Although industry interests have argued that even confidential submission of trade secrets to government diminishes their value and risks disclosure through inadvertent mistake or subsequent judicial proceedings, courts have rightfully rejected such arguments.67

A. First Principles of Trade Secrets Law

[20] According to first principles of trade secret doctrine, disclosure of proprietary information to governmental agencies does not diminish the property interests of the trade secret holders, provided the agency assures confidentiality.68 The very definition of trade secret is information that affords its holder an economic advantage over competitors, and regarding which its holder undertakes reasonable efforts to prevent disclosure to competitors.69 Because a trade secret’s only legally cognizable value is

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65 See infra Parts III.B, IV.

66 See infra Part III.A-B.


68 See Owens-Corning, 626 F.2d at 972 n.12.

69 See UNIF. TRADE SECRETS ACT § 1(4)(i) (1985); RESTATEMENT (FIRST) OF TORTS § 757 cmt. b (1939). The Restatement of Torts, widely accepted before the enactment of the UTSA, defines trade secret as “any formula, pattern, device or compilation of information which is used in one's business, and which gives him an opportunity to obtain an advantage over competitors who do not know or use it,” and which is in fact
the advantage it affords over competitors, sharing trade secret information confidentially with the government – a non-competitor – does not impinge upon the trade secret holder’s competitive advantage and thus does not reduce the property’s value.70 Furthermore, a trade secret holder’s right to exclude, perhaps the essential property right, is severely circumscribed.71 A cause of action accrues to a trade secret holder only through misappropriation by wrongdoing; obtainment of trade secret information by innocent means is non-actionable.72 Because the right to exclude applies only to misappropriation, the proprietary right in trade secrets is a limited one, and governmental use of trade secrets, by definition not misappropriation, infringes no rights of the property holder.73

70 See Chevron Chem. Co. v. Costle, 641 F.2d 104, 115 (3d Cir. 1981) (finding the Restatement of Torts § 757 definition of trade secret unavailing for purposes of establishing a property right in confidential data as against internal agency use, because § 757 deals only with liability for public disclosure of trade secrets); see also UNIF. TRADE SECRETS ACT § 1(4)(i); RESTATEMENT OF TORTS § 757 cmt. b; Mark Q. Connelly, Secrets and Smokescreens: A Legal and Economic Analysis of Government Disclosures of Business Data, 1981 WIS. L. REV. 207, 251 n.210 (noting that a trade secret’s value is harmed only through public disclosure and where a competitor will obtain that trade secret information).

71 See Aetna v. United States, 444 U.S. 164, 179-80 (1979) (“In this case, we hold that the ‘right to exclude,’ so universally held to be a fundamental element of the property right, falls within [the] category of interests that the Government cannot take without compensation.”) (footnotes omitted); Int’l News Serv. v. Assoc. Press, 248 U.S. 215, 250 (1918) (Brandeis, J., dissenting) (“An essential element of individual property is the legal right to exclude others from enjoying it.”).

72 See UNIF. TRADE SECRETS ACT §§ 1(2), 2, 3 (providing entitlement to relief only for misappropriation); RESTATEMENT OF TORTS §§ 757, 758(a) (providing trade secret liability only for wrongdoing); MERGES ET AL., supra note 14, at 37 (explaining that trade secret liability only accrues for information acquired wrongfully).

73 See UNIF. TRADE SECRETS ACT §§ 1(2), 2, 3; RESTATEMENT OF TORTS §§ 757, 758(a); see also Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1010-11 (1984) (stating that there
B. Judicial Rulings

[21] Courts have given a frosty reception to industry arguments that confidential disclosures to the government compromise property interests. Industry has argued that disclosure to regulatory agencies threatens its possessory interests in trade secrets, either through the very existence of the information outside industry control, or because such secrets could be revealed to the public through subsequent judicial or congressional proceedings. Nevertheless, courts have universally rejected constitutional challenges to mandatory submission of trade secrets to regulatory agencies where confidentiality is maintained.

is no recognition of frustration of investment-backed expectations except where data is disclosed to the public).

74 See, e.g., Pharm. Care Mgmt. Assoc. v. Rowe, 307 F. Supp. 2d 164, 179 & n.16 (D. Me. 2004) (“This Court does not credit PCMA’s fear that the disclosure protections of [the state statute] are illusory because the information could be revealed in a subsequent judicial proceeding.”); Monsanto, 467 U.S. at 1010-11 (stating that there is no cognizance of frustration of investment-backed expectations except where data is disclosed to the public).

75 See FTC v. Owens-Corning Fiberglas Corp., 626 F.2d 966, 972 n.12 (D.C. Cir. 1980) (rejecting contentions that the presence of trade secrets outside a corporation’s control lessened their value and amounted to a taking); Pharm. Care, 307 F. Supp. 2d at 179 n.16; James T. Halverson, An Analysis of the Oil and Natural Gas Reserve Reporting Problem: The Government’s Need to Know Versus the Private Company’s Need to Protect the Confidentiality of Its Sensitive Business Information, 27th Inst. On Oil & Gas L. 119, 134-35 (1976) (arguing lack of reliable confidentiality where proprietary information was released by the agency to a congressional subcommittee).

76 See FCC v. Schreiber, 381 U.S. 279, 288, 300 (1965) (enforcing an agency subpoena duces tecum of confidential, competitively sensitive business information); Owens-Corning, 626 F.2d at 968 (enforcing an agency order mandating the submission of confidential business information, including trade secrets); FTC v. Texaco, Inc., 555 F.2d 862, 876, 877, 883, 885 (D.C. Cir. 1977) (en banc) (enforcing administrative subpoenas duces tecum of highly sensitive proprietary natural gas reserves data); Cont’l Oil Co. v. Fed. Power Comm’n, 519 F.2d 31, 32 (5th Cir. 1975) (upholding an agency order requiring the submission of detailed proprietary natural gas sales information); see also Monsanto, 467 U.S. at 1002, 1010-11 (recognizing takings argument only where agency disclosed data to public or competitors); Philip Morris, Inc. v. Reilly, 312 F.3d 24, 45 (1st Cir. 2002) (distinguishing unconstitutional Massachusetts statute mandating public disclosure of secret cigarette ingredients from Texas statute mandating confidential submission to state agency); Chevron v. Chemical Co. v. Costle, 641 F.2d 104, 115 (3d
[22] For example, in *FTC v. Owens-Corning Fiberglas Corp.* the District of Columbia Circuit enforced a Federal Trade Commission (“FTC”) order requiring submission of documents containing highly confidential trade secrets.\(^77\) In *Owens-Corning*, as part of a nonpublic antitrust investigation of the insulation industry, the FTC issued subpoenas duces tecum to Owens-Corning and other corporations to produce certain documents.\(^78\) Owens-Corning refused to comply on the grounds that the documents contained trade secrets, including detailed information on costs, sales, customers, business plans, and secret processes.\(^79\) Owens-Corning argued that inadequate safeguards of confidentiality and the increased possibility of disclosure due to the documents’ presence beyond the company’s exclusive control lessened the trade secrets’ value, amounting to a taking.\(^80\) The court rejected these arguments as “devoid of

\(^77\) *Owens-Corning*, 626 F.2d at 968-69.

\(^78\) *Id.*

\(^79\) *Id.* at 969 n.1.

\(^80\) *See id.* at 971-72 & n.12.
any merit,” stating that agency use of the information is not a public disclosure nor does it interfere with Owens-Corning’s ability to use its trade secrets, and ordered compliance with the FTC subpoena.81

IV. LEGALITY OF MANDATORY PUBLIC DISCLOSURE

A. Information “Voluntarily” Submitted

[23] In evaluating mandatory public disclosure, some courts afford great weight to industry’s voluntary submission of trade secrets to agencies before filing suit, which diminishes or even extinguishes reasonable investment-backed expectations.82 The most well-known instance of forced public disclosure is probably in the context of the Federal Insecticide, Fungicide, and Rodenticide Act (“FIFRA”),83 and the Supreme Court’s Monsanto decision, in which the Court ruled for the first time that proprietary information constitutes property protected by the Takings Clause.84 Monsanto challenged Environmental Protection Agency (“EPA”) regulations under FIFRA that required pesticide manufacturers to provide health, safety, and environmental data to register pesticides with the EPA.85 Numerous amendments to FIFRA were made over the years: before 1972, the statute contained no express promise of confidentiality of submitted information; the 1972 amended statute expressly guaranteed confidentiality of proprietary data; and the 1978 amendments provided that proprietary data would be used to evaluate competitors’ registration applications and revealed to the public after a ten-year confidentiality period.86 Monsanto argued that it had invested millions of dollars in producing the registration data, and public disclosure

81 Id. at 968, 972 n.12.

82 See, e.g., Monsanto, 467 U.S. at 1006-10; Philip Morris, Inc. v. Reilly, 312 F.3d 24, 37-38 (1st Cir. 2002).


84 Monsanto, 467 U.S. at 1003-04.

85 Id. at 998.

86 Id. at 991-96.
and use in competitors’ registrations granted “[its] competitors a free ride.”

[24] The Court ruled that the EPA’s disclosure of data submitted after 1978 or before 1972 does not constitute a taking, because Monsanto had notice of the manner in which the EPA would use and disclose any data. Monsanto, faced with the choice of either submitting the data or foregoing a license to market its pesticides, had voluntarily chosen to submit its data. Monsanto thus had no reasonable investment-backed expectation that its trade secrets submitted during these periods would remain secret and retain their value. The Court further found the investment-backed expectations to so overwhelm the other *Penn Central* factors as to be dispositive, and thus no taking had occurred. The Court held that this regulatory scheme was not an unconstitutional condition on Monsanto’s right to do business, “for such restrictions are the burdens we all must bear in exchange for ‘the advantage of living and doing business in a civilized community.’” Nevertheless, public disclosure of data submitted between 1972 and 1978 would constitute a taking due to the 1972 FIFRA’s express statutory promise of confidentiality, which created so strong a reasonable investment-backed expectation as to again dispose of the takings question without resort to the other *Penn Central* factors.

[25] Court precedent is thus clear that if licensing regulations require offshore drilling companies submit health, safety and environmental data

87 *Id.* at 999.

88 *See id.* at 1006-09.

89 *See id.*

90 *See Monsanto*, 467 U.S. at 1006-09; *see also* *Smith v. Dravo Corp.*, 203 F.2d 369, 373-74 (7th Cir. 1953) (discussing how actual secrecy is a definitional aspect of trade secrets).

91 *Monsanto*, 467 U.S. at 1005-06.

92 *Id.* (quoting Pa. Coal Co. v. Mahon, 260 U.S. 393, 422 (1922) (Brandeis, J., dissenting)).

93 *See id.* at 1005-06, 1010-12.
and offer no guarantee of confidentiality, companies that voluntarily submit proprietary data have no claim of a taking or of an unconstitutional condition.94

B. Effectiveness of Preemptive Lawsuits Before Disclosure

[26] Whereas the takings issue is easily disposed of when a company discloses its trade secrets first and then files suit, the question of a company filing suit ex ante is considerably more difficult to answer.95 This distinction hinges upon the company’s reasonable investment-backed expectations; where the company has voluntarily submitted its proprietary information in the absence of an express promise of confidentiality, it has severely compromised its investment-backed expectations of that information’s competitive value.96

[27] Early cases appear to support the government’s right to force public disclosure. In the 1919 decision of Corn Products Refining Co. v. Eddy, the Supreme Court held that a table syrup manufacturer could be required by state law to publicly reveal the names and percentages of each ingredient used in its secret syrup recipe without violating the Takings Clause.97 The Court held it “too plain for argument that a manufacturer

94 See id. at 1006-07; see also Tri-Bio Lab., Inc. v. United States, 836 F.2d 135, 139-41 (3d Cir. 1987) (finding a taking due to reasonable investment-backed expectations based on an express regulatory guarantee of confidentiality); Chevron Chem. Co. v. Costle, 641 F.2d 104, 115-16 (3d Cir. 1981) (holding there was no taking of submitted data because there were no reasonable investment-backed expectations in the absence of an express statutory or regulatory promise of confidentiality); Westinghouse Elec. Corp. v. U.S. Nuclear Regulatory Comm’n, 555 F.2d 82, 95 (3d Cir. 1977) (“A voluntary submission of information by an applicant seeking the economic advantages of a license can hardly be called a taking.”); Dep’t of Natural Res. v. Arctic Slope Reg’l Corp., 834 P.2d 134, 145 (Alaska 1991) (holding the public disclosure of valuable oil well data voluntarily submitted was not a taking); N. States Power Co. v. N.D. Pub. Serv. Comm’n, 502 N.W.2d 240, 247 (N.D. 1993) (holding the public disclosure of trade secret data voluntarily submitted was not a taking).

95 See, e.g., Philip Morris, Inc. v. Reilly, 312 F.3d 24, 37-39 (1st Cir. 2002).

96 See id.

... has no constitutional right to sell goods without giving the purchaser fair information of what is being sold.”98 The Court reaffirmed its decision in the 1937 case National Fertilizer Association v. Bradley, upholding a fertilizer labeling statute.99

[28] In Pennzoil Co. v. Federal Power Commission, a case particularly relevant to offshore drilling regulation, the Fifth Circuit grappled with a Federal Power Commission (“FPC”) order requiring offshore natural gas producers to publicly disclose volume and location data of their wells.100 In Pennzoil, drilling companies argued that a major purpose of leasing tracts of ocean land from the federal government is to discover clues to the potential productivity of nearby tracts for purposes of future leases, and that disclosure of such data would enable competitors to free ride on another’s investment.101 The court found against the FPC for its lack of “thoughtful consideration” and apparent cavalier attitude towards stripping industry of its trade secrets.102 Yet the court implied that upon proper agency consideration and demonstration of public necessity, such regulation is valid – even when challenged ex ante.103

[29] At the other end of the spectrum, the First Circuit in its 2002 Philip Morris, Inc. v. Reilly decision ruled that a state law requiring tobacco companies to disclose publicly all ingredients in their cigarettes, a supremely valuable trade secret, was an unconstitutional taking of property without compensation.104 The court distinguished Corn Products

98 Id. at 431.
101 Id. at 629.
102 Id. at 632 (detailing three factors the FPC must consider in determining whether such information should be publicly disclosed).
103 See id.; see also Superior Oil Co. v. Fed. Energy Reg. Comm’n, 563 F.2d 191, 205 (5th Cir. 1977) (reaching a decision similar to the holding in Pennzoil regarding the same FPC order).
104 See Philip Morris, Inc. v. Reilly, 312 F.3d 24, 45-46 (1st Cir. 2002).
by a narrow reading of the Supreme Court’s “fair information” language, finding that fair information under the labeling statute in *Corn Products* encompasses full disclosure of all ingredients due to that statute’s purpose of preventing consumer deception, whereas fair information for purposes of a statute directed to health and safety means something short of disclosure of all additives.\(^{105}\) The court also distinguished *Monsanto*, in which public disclosure of data submitted before 1972 or after 1978 did not constitute a taking, because Monsanto had voluntarily submitted its trade secrets without a reasonable expectation of confidentiality – destroying its proprietary interest in the process – whereas Philip Morris filed suit before submitting.\(^{106}\) The distinction between suit ex post and ex ante carries a compelling logic: the investment-backed expectation calculus is undoubtedly altered by the voluntary submission of proprietary information without a guarantee of confidentiality.\(^{107}\)

\(^{105}\) See id. at 40.

\(^{106}\) See id. at 37-38.

\(^{107}\) See id.; Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1007 (1984) (“[A] voluntary submission of data by an applicant in exchange for the economic advantages of a registration can hardly be called a taking.”); Westinghouse Elec. Corp. v. Nuclear Reg. Comm’n, 555 F.2d 82, 95 (3d. Cir. 1977). Although this timing distinction may seem unfair – governmental usurpation of power is valid as applied to the naïve, who submit proprietary data before filing suit – this result may merely illustrate the proper importance of process. See *Philip Morris*, 312 F.3d at 38. On the other hand, the *Monsanto* and *Westinghouse* courts properly ruled only on the narrow grounds of the cases before them; they did not attempt, nor should they be read, to definitively announce a rule regarding investment-backed expectations outside of that narrow class. See *Monsanto*, 467 U.S. at 1007; KARL N. LLEWELLYN, THE BRAMBLE BUSH 38 (1930) (“[T]he court can decide only the particular dispute before it; . . . all that is said is to be read with eyes on that dispute. . . . Look to your own discussion, look to any argument. You know where you would go. You reach, at random if hurried, more carefully if not, for a foundation, for a major premise. But never for itself. Its interest lies in leading to the conclusion you are headed for. You shape its words, its content, to an end decreed. More, with your mind upon your object you use words, you bring in illustrations, you deploy and advance and concentrate again. When you have done, you have said much you did not mean. You did not mean, that is, *except* in reference to your point. You have brought generalization after generalization up, and discharged it at your goal; all, in the heat of argument, were over-stated. None would you stand to, if your opponent should urge them to another issue. So with the judge. Nay, more so with the judge.”) (emphasis in original). Reading too much into the narrow grounds cited might be misguided, especially given the broad implications of some of the *Monsanto* and *Corn Products*
C. Implications for Potential Regulation of Deepwater Offshore Drilling

[30] Philip Morris presents an important consideration for potential regulation of the offshore oil drilling industry. Judge Torruella, authoring the lead opinion, held the investment-backed expectations in Monsanto dispositive only due to an express statutory promise of confidentiality. Thus, over a blistering concurrence, the lead opinion found the forced public disclosure of cigarette ingredients a taking only after analyzing the other two Penn Central factors. It held the statute unconstitutional due chiefly to the character of the government action. Thus, the lead opinion would find, where no express promise of confidentiality exists, a forced disclosure of trade secrets constitutional – even when challenged ex ante – if frustration of investment-backed expectations is not total and the character of the government action is proper. The concurrence, by contrast, found the Massachusetts statute unconstitutional due solely to frustration of investment-backed expectations, finding that factor dispositive even without an express confidentiality guarantee.

language. See Monsanto, 467 U.S. at 1007; see also Pennzoil Co., 534 F.2d at 632 (implying that the forced public disclosure of a trade secret was not invalid upon a proper agency demonstration of need, despite filing suit before submitting data); Superior Oil Co., 563 F.2d at 205 (implying a similar tenet as Pennzoil).

108 See Philip Morris, 312 F.3d at 45-46.

109 See id. at 33 n.5, 36, 38-39.

110 Id. at 48-49 (Selya, J., concurring) (“[T]he lead opinion seems to assume that when Penn Central applies, stare decisis does not.”).

111 See id. at 33-35 & 33 n.5.

112 Id. at 44-45 (“If I was convinced that this regulation was tailored to promote health and was the best strategy to do so, I might reconsider our analysis. . . . [T]he character of the government action determines the case.”).

113 See id.

114 See Philip Morris, 312 F.3d at 48-49 (Selya, J., concurring).
[31] Potential offshore oil drilling regulations may drive a wedge between the Philip Morris opinions. The lead opinion held the cigarette ingredient disclosure statute invalid due to the character of the government action, specifically regarding doubts that indiscriminate public disclosure of all ingredients, dangerous or benign, served the purported government purpose of promoting health and safety. By contrast, regulation requiring public disclosure of data relating specifically to health, safety, and environmental hazards in offshore drilling would not suffer the same character-of-the-government-action infirmity. Many policy reasons support agency disclosure of data to the public. Outside scientific investigation is often the only way to ensure unbiased research targeting issues affecting health and safety. Furthermore, after the failure of the oil industry and regulatory agencies in the Gulf oil spill, Alaska, and elsewhere, the need for public disclosure is overwhelmingly great.

115 See id. at 45-46 (“The Disclosure Act causes the tobacco companies to lose their trade secrets, entirely, and appellants advance no convincing public policy rationale to justify the taking itself.”) (emphasis added).

116 See id.

117 See id. at 45 (suggesting the validity of a Minnesota statute requiring public disclosure only of specific dangerous cigarette additives); see also Noranda Exploration, Inc. v. Ostrom, 335 N.W.2d 596, 629-30 (Wis. 1983) (finding forced public disclosure a taking due to the character of the government action only because the regulation did not advance the governmental purpose).


119 See Press Release, Harvard School of Public Health, Three Harvard School of Public Health Alumni Named to New FDA Tobacco Advisory Committee (March 3, 2010), available at http://www.hsph.harvard.edu/news/press-releases/2010-releases/hsph-alumni-named-to-new-fda-tobacco-advisory-committee.html (“The Harvard School of Public Health is in a unique role to contribute to FDA regulation of tobacco products, as we have one of the only research centers in the nation that has conducted and published extensive work on the design and addictiveness of the actual product.”) (quoting Gregory N. Connolly, Tobacco Products Scientific Advisory Committee).
Thus, even if other courts were to follow the First Circuit’s lead, regulation requiring limited public disclosure of health, safety, and environmental data would properly serve a legitimate governmental purpose, and would likely be valid under *Monsanto* and *Philip Morris*, even when challenged ex ante.121

V. EXACTIONS DOCTRINE AND TRADE SECRETS

Further grounds exist for regulation mandating public disclosure of health, safety, and environmental data in offshore drilling: drilling companies lease the tracts of ocean land from the federal government.122 Thus, even if regulation requiring public disclosure were held invalid when challenged ex ante, the government may be able to accomplish through contract or property what it could not by regulation.123 The contract for lease of a tract of ocean land could contain an express agreement to assign to the government the proprietary interest in any data specific to that locale.124

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120 *See* sources cited *supra* notes 3-6.

121 *See* Stanley H. Abramson, *Confidential Business Information Versus the Public’s Right to Disclosure—Biotechnology Renews the Challenge*, 34 KAN. L. REV. 681, 699-700 (1986) (proposing limited public access to proprietary health, safety, and environmental data in the biotech industry for a limited period, on EPA premises, and only by demonstrated non-competitors). It would further appear that, in deepwater offshore drilling, where tremendous liability and public fallout can accrue through a mishap, regulated companies could perceive an “average reciprocity of advantage” in being subject to transparent health, safety, and environmental regulation. Penn Cent. Transp. Co. v. City of New York, 438 U.S. 104, 140 (1978) (Rehnquist, J., dissenting) (citation omitted); *see* Connelly, *supra* note 70, at 251–55 (urging Justice Rehnquist’s “average reciprocity of advantage” standard for evaluating takings of trade secrets, and using such to justify the *Westinghouse* decision (citation omitted) (internal quotation marks omitted)).


123 *See* 43 U.S.C. § 1332.

124 *See id.*
Examination of the mandatory public disclosure of proprietary health, safety, and environmental data through the lens of land use law reveals that regulating deepwater leaseholders’ exploitation of the mineral rights in their real property possibly implicates the exactions doctrine in a manner that regulation of foods, pesticides, and cigarettes does not. Subpart A of Part V attempts to extrapolate the Supreme Court’s prior exactions decisions to the possible avenues by which courts might extend exactions jurisprudence as it relates to the mandatory public disclosure of trade secrets. It also argues that the arbitrary land-use criterion should not limit the exactions doctrine. Rather the exactions doctrine should extend to the mandatory disclosure of trade secrets, at least in the adjudication context. Subpart B explores the implications of exactions jurisprudence for conditioning the permitting of a leaseholder’s drilling and exploration activities upon the disclosure of proprietary data. It then argues that most instances of mandatory public disclosure will satisfy the nexus and proportionality requirements of the exactions doctrine. Subpart C explores the validity of the federal government expressly conditioning its leasing of the ocean subsoil and seabed upon a contractual obligation to publicly disclose health, safety, and environmental data. Finally, Subpart D advances policy arguments for why the exactions doctrine, even if applied to deepwater drilling regulation mandating public disclosure, should not invalidate such regulation.

A. Extrapolation from Existing Exactions Decisions

1. Requirement of Land Use

Nollan and Dullan both involved conditioning the grant of land development permits upon a grant of an interest in that parcel of land, leading to the interpretation that the exactions doctrine only applies to doubly landed exactions. Yet there is nothing inherent limiting the


127 See Philip Morris, Inc. v. Reilly, 312 F.3d 24, 45-46 (1st Cir. 2002).

exactions doctrine to land development permits alone, nor to exactions of interests in land.\textsuperscript{129} The basic purpose of the exactions doctrine is to prevent the government from unfairly leveraging a petitioner’s chance need of a permit as a pretext to extract constitutionally protected property without compensation.\textsuperscript{130} The exactions policy furthers a principal purpose of the Takings Clause of the Constitution, which is “to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole.”\textsuperscript{131} All that is required, in theory, to implicate the exactions doctrine’s underlying policy is that the government exaction demand property protected under the Takings Clause.\textsuperscript{132} This includes any property that the government is without constitutional authority to confiscate without compensation.\textsuperscript{133}

[35] Four prototypical scenarios present themselves as potential candidates for being subject to the exactions doctrine.\textsuperscript{134} These scenarios represent the possible combinations of the two basic “landedness” factors of potential exactions: whether the permitting petition is to improve land, and whether the exaction the government demanded in exchange is of an

\textsuperscript{129} Neither \textit{Dolan} nor \textit{Nollan} contains language expressly limiting the exactions doctrine to land development permits or land interests. \textit{See Dolan}, 512 U.S. at 388-91; \textit{Nollan}, 483 U.S. at 834-37; \textit{see also Monsanto}, 467 U.S. at 1003 (stating that the Supreme Court has found intangible interests to be property for purposes of the Takings Clause).

\textsuperscript{130} \textit{See Dolan}, 512 U.S. at 390 (“The distinction, therefore, which must be made between an appropriate exercise of the police power and an improper exercise of eminent domain is whether the requirement has some reasonable relationship or nexus to the use to which the property is being made or is merely being used as an excuse for taking property simply because at that particular moment the landowner is asking the city for some license or permit.” (quoting Simpson v. North Platte, 292 N.W.2d 297, 301 (Neb. 1980))).

\textsuperscript{131} \textit{Armstrong v. United States}, 364 U.S. 40, 49 (1960).

\textsuperscript{132} \textit{See Dolan}, 512 U.S. at 383-84, 388-91.

\textsuperscript{133} \textit{See id.}

\textsuperscript{134} \textit{See id.}
interest in land. Thus, as illustrated in Figure 1, four scenarios are possible: (1) the requested permit is for development of land the petitioner owns, and the exaction is for an interest in land (both “landed”); (2) the permit is not for land development but the exaction is for an interest in land (one “landed”); (3) the permit is to develop land the petitioner owns but the exaction is for Takings-Clause-protected property other than land (one “landed’); and (4) neither the permit is for land development nor is the exaction for an interest in land (neither “landed”). As noted, Nollan and Dolan involved the first scenario, in which both the petition and the exaction involved the petitioner’s land. Monsanto, by contrast, involved the fourth scenario, in which neither the requested permit – to market pesticides – nor the exaction the government demanded – public disclosure of trade secrets – concerned land.

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135 See id. at 386-88.

136 See id. at 377 (stating that the petitioner challenged the approval of a building permit, where such approval was conditioned “on the dedication of a portion of her property for flood control and traffic improvements”).

137 See id. at 383-84, 388–91.


139 See Ruckelshaus v. Monsanto Co., 467 U.S. 986, 1003-05 (1984). Note that the trade secrets in Monsanto did constitute property protected by the Takings Clause of the Constitution. Id. at 1003-04.

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Figure 1
The Supreme Court decided *Monsanto* before *Nollan*, and the Court did not explicitly analyze the case through the exactions doctrine. Nonetheless, courts conceivably could apply the exactions doctrine and its requirements of essential nexus and rough proportionality to any of the above four types of scenarios. It is likely that courts will at the very least limit the doctrine to interests marginally related to land, for both policy and political reasons. However, courts should extend application of the exactions doctrine to non-land-use scenarios. As previously noted, there is no inherent distinction between land use and non-land use for purposes of exactions. If the exactions doctrine is in fact a logical application of the unconstitutional conditions doctrine, and its policies sound, then its logic should not be artificially cabined by the arbitrary criterion of land use. The doctrine should thus apply in cases of trade

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140 See *Nollan*, 483 U.S. at 836-37; *Monsanto*, 467 U.S. at 1003-05.


142 See Lingle v. Chevron U.S.A., Inc., 544 U.S. 528, 538 (2005) (describing the context in which the exactions doctrine applies as the “special context of land-use exactions”); *Nollan*, 483 U.S. at 841 (“[O]ur cases describe the condition for abridgement of property rights through the police power as a ‘substantial advanc[ing]’ of a legitimate state interest. We are inclined to be particularly careful about the adjective where the actual conveyance of property is made a condition to the lifting of a land-use restriction, since in that context there is heightened risk that the purpose is avoidance of the compensation requirement, rather than the stated police-power objective.”); Plater et al., supra note 141, at 900-01, 929 (describing the intense political machinations motivating takings disputes and alluding to the effect and power of “property rights advocates” in advancing the *Nollan* and *Dolan* cases to the Supreme Court). The Supreme Court has already taken a step to limit the application of the exactions doctrine, declining to apply it to challenged regulatory actions not involving the conditioning of a permit grant upon exactions and emphasizing its special context of land-use. See Monterey v. Del Monte Dunes, 526 U.S. 687, 702 (1999) (“Although in a general sense concerns for proportionality animate the Takings Clause, we have not extended the rough-proportionality test of *Dolan* beyond the special context of exactions–land-use decisions conditioning approval of development on the dedication of property to public use.”) (internal citations omitted) (emphasis added).

143 See supra notes 129-133 and accompanying text.
secret takings, such as *Monsanto*.\(^{144}\) Nevertheless, in situations where the exaction is the disclosure of health, safety, and environmental impact data, the essential nexus and proportionality requirements of the exactions doctrine are usually satisfied. Thus, the exactions doctrine, while applicable to situations involving deepwater drilling, will only work at the margins.

2. Legislative Versus Adjudicatory Action

[37] As noted in Part II, there is ample basis for cabining the exactions doctrine to individualized adjudicatory actions.\(^{145}\) The Supreme Court in *Nollan* and *Dolan* emphasized the adjudicatory nature of the agency actions struck down in those cases, and subsequent Supreme Court cases have emphasized this seemingly essential element.\(^{146}\) Furthermore, exactions jurisprudence is itself a special application of the doctrine of unconstitutional conditions.\(^{147}\) As the Court explained in *Dolan*, the doctrine of unconstitutional conditions in the special context of exactions provides that the government may not require a person to forfeit a constitutional right – the right to not have property confiscated – in exchange for a “discretionary benefit conferred by the government” where the benefit has little or no relationship to the property.\(^{148}\) By labeling the exchanged-for government benefit as “discretionary,” the Court implies an individualized adjudicatory action, not a purely legislative rule applying broadly and equally, without distinction, to an entire class of parties.\(^{149}\)

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\(^{144}\) See *Monsanto*, 467 U.S. at 1003-07.

\(^{145}\) See supra Part II.

\(^{146}\) See *Lingle*, 544 U.S. at 547 (characterizing the holding in *Dolan* as applying to adjudicative action); *Dolan*, 512 U.S. at 385; *Nollan*, 483 U.S. at 841.

\(^{147}\) See *Lingle*, 544 U.S. at 547; *Dolan*, 512 U.S. at 385.

\(^{148}\) *Dolan*, 512 U.S. at 385 (emphasis added); see *Lingle*, 544 U.S. at 547.

\(^{149}\) See *Lingle*, 544 U.S. at 547; *Dolan*, 512 U.S. at 385; Bi-Metallic Inv. Co. v. State Bd. of Equalization, 239 U.S. 441, 445-46 (1915) (distinguishing individual adjudication from general legislation based on the effect on individuals rather than the broad class); Yesler Terrace Cmty. Council v. Cisneros, 37 F.3d 442, 448 (9th Cir. 1994) (“First, adjudications resolve disputes among specific individuals in specific cases, whereas
3. Application to Deepwater Oil Drilling

[38] The land-use aspects of deepwater oil drilling might significantly affect the application of the exactions doctrine. Depending on the situation, such drilling may or may not involve land use.\textsuperscript{150} Specifically, if the government were to condition the granting of a drilling and exploration permit for land already leased by the drilling company on an exaction of trade secrets, this would be an example of the third scenario previously identified – the permit is for land use development but the exaction is for property other than land.\textsuperscript{151} By contrast, if the government were to condition the ocean-land leases on an express contractual obligation upon the lessee to publicly disclose health, safety, and environmental information, it would likely be an example of the fourth scenario, in which neither the requested permit nor the exaction relate to land the petitioner already owns.\textsuperscript{152}


\textsuperscript{151}See supra para. 35.

\textsuperscript{152}Note that postregulation acquisition, though ordinarily irrelevant to \textit{Penn Central} takings and exactions analysis, is material in this unique situation of leasing federal lands. See \textit{Palazzolo} v. Rhode Island, 533 U.S. 606, 616, 630 (2001) (holding that postregulation acquisition is not a bar to \textit{Penn Central} takings claims); \textit{Nollan} v. Cal. Coastal Comm’n, 483 U.S. 825, 833 n.2 (1987) (holding that a plaintiff’s rights were not altered by having acquired the property after the government’s public announcement of its intention to condition permits on the transfer of easements, because the plaintiff acquired the full property rights of the prior owner of the property). Unlike in \textit{Palazzolo} and \textit{Nollan}, where title and all legal claims were transferred from the prior landowner to the plaintiff, here, the government is itself the prior owner and lessor of the ocean land. See \textit{Palazzolo}, 533 U.S. at 630; \textit{Nollan}, 483 U.S. at 833 n.2. Governmental declarations of leasing conditions on ocean land may not be viewed logically as diminishing the government’s own interest as landowner, and thus no conveyable legal right to challenge the regulation exists here. See \textit{Palazzolo}, 533 U.S. at 630; \textit{Nollan}, 483 U.S. at 833 n.2. This then is that unique circumstance where Justice Brennan’s dissent in \textit{Nollan} speaks for the majority as well, where the title taker by postregulation acquisition is indeed on notice of the conditions upon the property. \textit{Nollan}, 483 U.S. at 860 (Brennan, J.,
[39] The form of potential deepwater drilling regulation – whether legislative or adjudicatory – will also significantly affect the application of the exactions doctrine. Regulation crafted in purely legislative form would likely avoid the exactions doctrine entirely. Thus, a statute or agency rule that provides – in a manner requiring little interpretation – that all applicants for drilling and exploration must, as a class, publicly disclose certain specified data, such as the geological composition and structure of a drilling area, or the volume, pressure, location, and composition of oil reserves drilled, would likely not be evaluated under the exactions doctrine. By contrast, a rule or statute carrying a more general mandate – e.g., the disclosure of information critical to health, safety, and the environment – would require further agency interpretation and tailoring to individual drillers in its application within licensing proceedings. Such disclosure requirements would tend more toward adjudication and would, at least in this respect, fall within the ambit of exactions jurisprudence.

B. Conditioning a Permit to Explore and Drill on Proprietary Data Disclosure

[40] It is possible to reread the Monsanto decision in light of, and consistent with, the subsequent Nollan decision and to hold the exactions doctrine applicable to the Monsanto situation.153 In Nollan, the Court stated that the taking of property, which would otherwise undoubtedly be unconstitutional, is valid when attached to a development permit and when satisfying the exactions doctrine.154 Monsanto may be read to say just the

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154 See Nollan, 483 U.S. at 836 (“Although such a requirement, constituting a permanent grant of continuous access to the property, would have to be considered a taking if it were not attached to a development permit, the Commission’s assumed power to forbid construction of the house in order to protect the public’s view of the beach must surely include the power to condition construction upon some concession by the owner, even a concession of property rights, that serves the same end.”).
same, that (except during the years of the express statutory promise of confidentiality) Monsanto was forced to convey valuable property as a proper exercise of the EPA’s valid authority to outright prohibit the sale of Monsanto’s pesticides, and that the requirements of essential nexus and rough proportionality between such mandatory disclosure and the purpose of such prohibition were satisfied.\footnote{155} In other words, the Court may have been applying the nascent exactions doctrine to that case – though an example of the fourth scenario of non-land use – without saying as much.\footnote{156}

[41] In the case of deepwater oil drilling, the permit to explore and drill is actually a land use restriction, an example of the third exaction scenario previously identified.\footnote{157} If the exactions doctrine should be read to apply in Monsanto and is to be applied in similar cases, such as the marketing of food\footnote{158} and cigarettes,\footnote{159} then \textit{a fortiori} it must be adhered to in land use regulation such as oil drilling. If courts apply the exactions doctrine to the case of regulatory agencies conditioning the grant of a permit to drill and explore upon the public disclosure of health, safety, and environmental data, two requirements must be met.\footnote{160} First, the agency must possess the authority to prohibit drilling and exploring outright.\footnote{161} Second, the probable impacts of the proposed drilling and exploration would need to be compared to the benefits of the public disclosure of such data and evaluated for an essential nexus as well as rough proportionality.\footnote{162}

\footnote{155}See Dolan v. City of Tigard, 512 U.S. 374 391 (1994); Nollan, 483 U.S. at 837; Monsanto, 467 U.S. at 1004.

\footnote{156}See Monsanto, 467 U.S. at 1003-05; see also Dolan, 512 U.S. at 391; Nollan, 483 U.S. at 836-37.

\footnote{157}See supra para. 35.


\footnote{159}See Philip Morris, Inc. v. Reilly, 312 F.3d 24, 45-46 (1st Cir. 2002).

\footnote{160}See Dolan, 512 U.S. at 391; Nollan, 483 U.S. at 836-37.

\footnote{161}See Nollan, 483 U.S. at 836-37.

\footnote{162}See Dolan, 512 U.S. at 391.
The relevant agency, the Mineral Management Service ("MMS"), most likely possesses the authority to prohibit drilling and exploration outright, pursuant to its statutory mandate to prevent negative impacts on safety and the environment.\textsuperscript{165} Furthermore, the MMS could likely establish an essential nexus between the impacts of the proposed drilling and exploration and the required exaction of disclosing proprietary health, safety, and environmental information to the public.\textsuperscript{164} As previously mentioned, public disclosure possesses many benefits that aid in effective oversight of health, safety, and environmental risk mitigation.\textsuperscript{165} However, the unknown nature of the impacts of the proposed drilling might complicate this essential nexus. Thus, it is merely the suspected impacts that share a nexus with such public disclosure. Nonetheless, there is probably a significant enough risk of public harm in all cases of drilling and exploration to satisfy the nexus requirement.\textsuperscript{166}

The closer call would probably be the rough proportionality requirement.\textsuperscript{167} As the Supreme Court made clear in \textit{Dolan}, no mathematical precision is necessary in evaluating this proportionality.\textsuperscript{168}

\textsuperscript{163} See 43 U.S.C. § 1332(3)-(4) (2006) (naming the outer Continental Shelf a vital national resource held by the Federal Government for the public and declaring it the policy of the United States to protect coastal and non-coastal areas from negative impacts of exploration and drilling on marine, coastal, and human environments); § 1351(a)-(c) (requiring the submission of a development and production plan to the Secretary before undertaking any development and production and detailing safety and environmental safeguards); 30 C.F.R. §§ 250.201 to 250.202 (2010) (detailing the plans and information that must be submitted before conducting any activities on an outer Continental Shelf lease).

\textsuperscript{164} See \textit{Nollan}, 483 U.S. at 836-37.

\textsuperscript{165} See McGarity & Shapiro, \textit{supra} note 118, at 841-43.

\textsuperscript{166} See § 1332(4) ("[E]xploration, development, and production of the minerals of the outer Continental Shelf will have significant impacts on coastal and non-coastal areas of the coastal States, and on other affected States.") (emphasis added). This would appear to amount to a Congressional finding of significant impacts in all cases of exploration, development, and production. See id.

\textsuperscript{167} See \textit{Dolan}, 512 U.S. at 391.

\textsuperscript{168} See id.
Nevertheless, there must be findings of the potential impacts of the drilling and the benefits of public disclosure, and an evaluation of their proportionality.\textsuperscript{169} How to reach these findings and weigh them against one another is a matter open to question.\textsuperscript{170}

[44] If evaluated from a numerical perspective, the difficulty is that the impacts of drilling and exploring seabed and subsoil of an undisclosed nature are unknown.\textsuperscript{171} Shall the MMS predict the expected value of unknown impacts based simply on the location of the lease and nothing more? It is probably not an overstatement to say that any relation such an estimation has to reality would be by mere chance. Perhaps a solution is that the MMS could require the disclosure \textit{in confidence} of all relevant health, safety, and environmental data, and using that confidential information make a finding as to the likely impacts of the proposed drilling and exploration.\textsuperscript{172} Whether the MMS must distill those impacts into dollar amounts is unresolved.\textsuperscript{173}

\textsuperscript{169} \textit{See id.} Note that the proportionality requirement is not between the \textit{financial burden} upon the petitioner of extinguishing trade secrets and the impacts of the proposed drilling and exploration. \textit{See id.} The financial burden upon the petitioner is not a factor in the reasoning laid out in \textit{Dolan}. \textit{See id.} (noting that the proper inquiry is the relationship in nature and extent between the impact of the proposed development and the benefits of the required dedication). The relevant constitutional consideration, rather, is whether the exacted dedication functions as a substitute for the outright prohibition of the petitioned-for development, both in nature and extent. \textit{See id.} \textit{See generally Nollan}, 483 U.S. at 836-37. It would nonetheless be interesting to consider whether an exorbitant exactions requirement upon the petitioner, in the presence of less expensive alternatives, would run afoul of substantive due process requirements.

\textsuperscript{170} \textit{See Dolan}, 512 U.S. at 391 (“[T]he city must make some sort of individualized determination that the required dedication is related both in nature and extent to the impact of the proposed development.”).

\textsuperscript{171} \textit{See supra} note 4 and accompanying text.

\textsuperscript{172} \textit{See supra} para. 21.

\textsuperscript{173} \textit{See generally Dolan}, 512 U.S. at 391 (making no mention of using the dollar amount of impacts in the constitutional calculus).
The benefits of the exaction – public disclosure of health, safety, and environmental information – are similarly difficult to quantify.\textsuperscript{174} Public disclosure improves agency decision-making, removes industry bias, and opens up to peer review the scientific inquiry into impacts and mitigation techniques.\textsuperscript{175} It also adds transparency, prodding regulators toward diligent oversight and providing a deterrent against ignoring their duty.\textsuperscript{176} What is the monetary or other value of this improved oversight, in a quantitative sense?\textsuperscript{177} The temptation to suggest a low amount based on the uncertain gain is tempered in this instance by the myriad preventable damages resulting from the Deepwater Horizon blowout: human health harms with unknown future consequences for affected persons in coastal states, especially as a result of dispersants used; entire economies of fishing, boating and tourism destroyed, at least temporarily; ecosystems devastated for an unknown number of years into the future.\textsuperscript{178} The only thing almost certain in this situation is that quantitative findings will be heavily dependent on who is making the finding.\textsuperscript{179} The number of externalized costs swept into the calculation, or overlooked, will likely determine the existence or lack thereof of a rough proportionality between the likely impacts and the benefits of the exaction.\textsuperscript{180}

\textsuperscript{174} See id. at 385-86.

\textsuperscript{175} See McGarity & Shapiro, supra note 118, at 841-43.

\textsuperscript{176} See id. at 843-44.

\textsuperscript{177} See Dolan, 512 U.S. at 391.


\textsuperscript{180} See Dolan, 512 U.S. at 391.
However, there is sound reason in the proposition that, because the exaction in this case is specifically to disclose information bearing on the risks of the proposed drilling and exploration, there is an inherent qualitative, definitional proportionality in such a comparison. The proportionality requirement is between the burden the regulated activity places upon society on the one hand, and the benefit that the exaction will bring society on the other. In the case of deepwater drilling, the MMS need only disclose the information necessary to determine the risks of drilling; thus the benefit of society’s possessing health, safety, and environmental information is conceptually identical to the severity of those same risks. This identity of scope should be sufficient to satisfy the Dolan Court’s language and intent, that “[n]o precise mathematical calculation is required,” only individualized findings indicating a rough proportionality. Thus, courts should indeed find the requisite rough proportionality in such a mandatory public disclosure, either through a finding of comparable values of benefits and impacts, or through a logical syllogism inherent in the majority of such mandatory disclosures.

C. Lease Containing Express Contractual Provision for Data Disclosure

If the government were to condition the lease of tracts of ocean land upon the disclosure of any health, safety, and environmental data, it

181 See id.
182 See supra note 169 and accompanying text.
183 See Dolan, 512 U.S. at 391. The difficulty with this reasoning is that an alternative to public disclosure exists – though arguably less effective – in the form of confidential disclosure to the agency. See McGarity & Shapiro, supra note 118. Thus, we might be confronted with the question, when evaluating proportionality, of whether to weigh the benefit of the exaction relative to available alternative exactions, or to weigh the exaction’s benefit with respect to a baseline of inaction. See supra note 169. Precedent might resolve this question, however, as the Court in Dolan did not seem to require consideration of other feasible alternatives in evaluating proportionality. See 512 U.S. at 388-91. Dolan merely required that the exaction substitute for an outright prohibition, both in nature and extent. See id.

184 Dolan, 512 U.S. at 391.
185 See id.
appears exceptionally unlikely that courts would find the exactions doctrine implicated. This is the scenario most similar to Monsanto, in which the Supreme Court appeared to evaluate the trade secret takings question simply from a regulatory takings standpoint. Nonetheless, it is possible to read that decision in light of the exactions doctrine later expounded in Nollan and Dolan.

[48] If the exactions doctrine is applicable to the Monsanto decision (and it should be), then the doctrine also finds application in the case of deepwater drilling with a land lease expressly conditioned upon the forfeiture of trade secrets. The government would need to show the ability to prohibit the leasing of the property outright, and the essential nexus and rough proportionality requirements would need to be met. While in the case of deepwater drilling the essential nexus and rough proportionality requirements would likely be satisfied, it appears unlikely that courts would extend the exactions doctrine to such a scenario unrelated to land use.

D. Policy Arguments

[49] The exactions doctrine, though applicable, should not inhibit the disclosure of health, safety, and environmental data. The Supreme Court in Nollan and Dolan declared that exactions in land-use carry the risk of being merely a pretext to avoid the compensation requirement of a valid exercise of eminent domain.

188 See supra paras. 40-41.
189 See Dolan, 512 U.S. at 388-91; Nollan, 483 U.S. at 836-37; Monsanto, 467 U.S. at 1003-05.
190 See Dolan, 512 U.S. at 391; Nollan, 483 U.S. at 836-37.
191 See supra notes 141-42 and accompanying text.
192 See Dolan, 512 U.S. at 390; Nollan, 483 U.S. at 841.
requiring the disclosure of health, safety, and environmental data relating to proposed deepwater drilling and exploration, little possible pretext exists.\textsuperscript{193} To the contrary, the public would simply want reasonable assurance of safety from the very risks the drilling threatens.\textsuperscript{194} Where the demanded exaction of property is solely to mitigate the risks that the property holder is causing, a court should find the requirements of the exactions doctrine satisfied.\textsuperscript{195}

[50] Furthermore, the exactions doctrine, like the takings doctrine, functions “to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole.”\textsuperscript{196} In the case of mandatory disclosure of health, safety, and environmental information related to proposed deepwater drilling and exploration, there is no public burden that an individual or group is forced to bear.\textsuperscript{197} The only burden existing in such a case is the need to ensure the safety of the petitioner’s own plan to drill and explore; the need for the proprietary data is merely to safeguard from the impacts of that drilling.\textsuperscript{198} For this reason, the exactions doctrine should not bar such regulation.\textsuperscript{199}

\textsuperscript{193} See \textit{Dolan}, 512 U.S. at 390; \textit{Nollan}, 483 U.S. at 841.

\textsuperscript{194} Although exceptional circumstances might raise the possibility of an ulterior motive for the public’s desire for oil-drilling proprietary information (such as the energy crisis of the 1970s, during which Congress and agencies demanded proprietary natural gas reserves data to determine domestic energy supplies), the norm for wanting health, safety, and environmental data is not such. Just as the Supreme Court cabined the exactions doctrine to adjudication — though in exceptional circumstances a legislative rule could also implicate concerns of pretext — a rule should not be fashioned from the exception here. See \textit{Dolan}, 512 U.S. at 390; \textit{Nollan}, 483 U.S. at 841.

\textsuperscript{195} See \textit{Dolan}, 512 U.S. at 390; \textit{Nollan}, 483 U.S. at 841.

\textsuperscript{196} See \textit{Dolan}, 512 U.S. at 384 (quoting \textit{Armstrong v. United States}, 364 U.S. 40, 49 (1960)) (internal quotations omitted).

\textsuperscript{197} See \textit{id.}

\textsuperscript{198} See \textit{id.}

\textsuperscript{199} See \textit{id.}
VI. CONCLUSION

[51] Congress and the relevant agencies could likely design regulation requiring offshore drilling interests to reveal information necessary for ensuring public safety and preventing unreasonable health or environmental risks. Mandatory confidential submission to government agencies is undoubtedly valid. Limited public disclosure is also constitutional, though uncertainty exists as to the application of the exactions doctrine to trade secrets: the possible streams of analysis by which courts may measure such regulation have been explicated, and suggestions made. It is hoped that these streams may offer some guidance to Congress and the relevant agencies in forging a legal path for effective regulation of deepwater drilling, and to the courts sitting in review.