



December 4, 2014

Via Electronic and Certified Mail

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Re: Sixty-Day Notice of Intent to Sue Over Violations of the Outer Continental Shelf Lands Act, the National Environmental Policy Act and the Coastal Zone Management Act

Dear Secretary Jewell, Acting Director Cruickshank, Director Salerno, Regional Director Aronson and Regional Director Ming:

Pursuant to 43 U.S.C. § 1349(a)(2)(A), this letter serves as the Center for Biological Diversity's official notice of intent to sue the Secretary of the Interior, the Bureau of Ocean Energy Management ("BOEM"), and the Bureau of Safety and Environmental Enforcement ("BSEE") for violations of the Outer Continental Shelf Lands Act ("OCSLA"), 43 U.S.C. § 1331, *et seq.*, in connection with hydraulic fracturing ("fracking") and other unconventional well stimulation occurring in oil and gas operations in federal waters off the coast of California.

Fracking and other unconventional well stimulation are inherently dangerous practices that have no place in fragile ocean ecosystems. They increase environmental damages beyond those of conventional oil development and pose a threat of serious harm to marine life, the coastal environment and communities living on and near the coast. But rather than prohibit such

practices or, at the very least, ensure they receive proper scrutiny under OCSLA, the National Environmental Policy Act (“NEPA”), 42 U.S.C. § 4321, *et seq.*, and the Coastal Zone Management Act (“CZMA”), 16 U.S.C. § 1451, *et seq.*, BOEM and BSEE are rubber-stamping permits authorizing fracking and other unconventional well stimulation with no analysis of the environmental impacts, no determination of whether such activities are consistent with the plans governing oil and gas development and production in the Pacific Region or California’s Coastal Management Program, and no public involvement. BOEM and BSEE’s actions – or lack thereof – violate a myriad of laws.

Specifically, BOEM’s failure to review and require revision of plans governing the development and production of offshore oil and gas leases (“DPPs”) for platforms from which fracking and other unconventional well stimulation occur violates its non-discretionary duty under OCSLA. Further, BSEE’s approval of permits to drill that involve fracking and other unconventional well stimulation when such practices are not described in the relevant DPPs violates OCSLA. Additionally, BSEE’s approval of such permits without conducting a comprehensive analysis of the environmental impacts of fracking and other unconventional well stimulation violates NEPA. Finally, BSEE’s approval of such permits without a determination from the state of California that such activities are consistent with California’s Coastal Zone Management Program violates CZMA.

This letter is provided pursuant to the 60-day notice requirement of the citizen suit provision of OCSLA to the extent such notice is deemed necessary by a court. *See* 43 U.S.C. § 1349(a)(2)(A). If BOEM and BSEE do not take action to remedy the violations detailed in this letter, the Center hereby provides notice of its intent to seek a judicial remedy.¹

I. Factual Background

A. Fracking and Other Unconventional Well Stimulation in the Pacific OCS

BOEM and BSEE do not make permits to drill in the Pacific OCS Region available for public notice and comment. As such, the public, as well as many state and federal regulators, did not learn that fracking was occurring in drilling operations off the coast of California until the summer of 2013, when journalists broke the story.² As stated by the oil and gas industry, offshore fracking “is similar to fracking that is being used to develop unconventional resources onshore.”³ The practice involves the injection of a mixture of water, sand and toxic chemicals into a well at extremely high pressure.⁴ It artificially propagates fractures in a rock layer creating cracks and passages through which oil, gas and other liquids can flow. According to the industry, offshore fracking has led to “significant improvement[s]” in the life and productivity of a well, as

¹ Not all of the violations of law detailed in this letter require a 60-day notice of intent to sue. The Center is providing Secretary Jewell, BOEM and BSEE notice of its intent to sue over such violations as a courtesy.

² Jason Dearen and Alicia Chang, *Oil Companies Frack in Coastal Waters off California*, Associated Press, Aug. 3, 2013, available at <http://bigstory.ap.org/article/oil-companies-frack-coastal-waters-calif>; Mike Ludwig, *Special Investigation: Fracking in the Ocean Off the California Coast* Truthout, July 25, 2013, available at <http://truthout.org/news/item/17765-special-investigation-fracking-in-the-ocean-off-the-california-coast>.

³ American Petroleum Institute, *Offshore Hydraulic Fracturing: Briefing Paper*, DM2013-112 (2013), available at: <http://www.api.org/~media/Files/Oil-and-Natural-Gas/Exploration/Offshore/Offshore-Hydraulic-Fracturing.pdf>.

⁴ For purposes of this letter, fracking also includes mini-fracks and frac packs.

well as the amount of oil and gas recovered from a well.⁵ However, an experienced petroleum engineer was recently quoted saying that introducing fracking to offshore oil development “no doubt adds complexity and risk.”⁶

But instead of examining the risks from offshore fracking, and the environmental impacts of such activities and its effects on California’s coastal resources, BOEM and BSEE are permitting such practices without any review whatsoever. A review of BOEM and BSEE’s records reveals that permits involving fracking have been approved at least 20 times over the last 20 years, including at least seven times in the last five years.⁷ Specifically, BSEE has approved permits involving fracking on at least the following occasions:

Platform	Operator	Well	Location	Date Approved
Platform Gilda	Torch	S-89	Santa Barbara Channel	10/03/1996
Platform Hidalgo	Chevron	C-1	Point Arguello Field	02/18/1997
Platform Hidalgo	Chevron	C-11	Point Arguello Field	02/18/1997
Platform Gilda	Torch	S-87	Santa Barbara Channel	03/10/1997
Platform Gilda	Torch	S-62	Santa Barbara Channel	05/01/1997
Platform Gilda	Nuevo	S-28	Santa Barbara Channel	11/14/1997
Platform Gilda	Nuevo	S-61	Santa Barbara Channel	04/17/1998
Platform Gilda	Neuvo	S-65	Santa Barbara Channel	04/02/2001
Platform Gilda	Neuvo	S-44	Santa Barbara Channel	07/30/2001
Platform Gilda	Neuvo	S-44	Santa Barbara Channel	08/22/2001
Platform Gilda	Neuvo	S-62	Santa Barbara Channel	11/21/2001
Platform Gilda	Neuvo	S-44	Santa Barbara Channel	02/20/2003
Platform Gilda	Neuvo	S-44	Santa Barbara Channel	02/26/2003
Platform Gail	Venoco	E-8	Santa Barbara Channel	11/23/2009
Platform Gail	Venoco	E-8	Santa Barbara Channel	12/23/2009
Platform Gail	Venoco	E-8	Santa Barbara Channel	01/28/2010
Platform Gilda	DCOR	S-005	Santa Barbara Channel	03/17/2013
Platform Gilda	DCOR	S-033	Santa Barbara Channel	CE issued on or before June, 10 2013 ⁸
Platform Gilda	DCOR	S-071	Santa Barbara Channel	CE issued on or before June 10, 2013 ⁸
Platform Gilda	DCOR	S-075	Santa Barbara Channel	CE issued on or before June 10, 2013 ⁸

Table 1, Known Fracking Approvals

⁵ American Petroleum Institute, *Offshore Hydraulic Fracturing: Briefing Paper*, DM2013-112 (2013), available at: <http://www.api.org/~media/Files/Oil-and-Natural-Gas/Exploration/Offshore/Offshore-Hydraulic-Fracturing.pdf>.

⁶ Dearen, Jason and Alice Chang (2013) Offshore fracking off California coast under review, drawing calls for increased regulation. *Associated Press*, Aug. 3, 2013. available at: http://www.huffingtonpost.com/2013/08/03/offshorefracking_n_3700574.html

⁷ See e.g., Santa Barbara Independent, Oil Spill Still Offshore, Dec. 9, 2008, <http://www.independent.com/news/2008/dec/09/oil-spill-still-offshore/>.

⁸ Based on information obtained through a response to a request under the Freedom of Information Act, the Center believes that BSEE approved fracking of well S-033, S-071 and S-075 from Platform Gilda in 2013, though does not have the precise date of approval.

However, as BOEM and BSEE have not adequately tracked the practice, it is possible they have issued fracking approvals on many more occasions.

Most of the known BOEM and BSEE-approved fracking activities have occurred in the Santa Barbara Channel – the site of the devastating 1969 oil spill, which is largely credited with the birth of the environmental movement and the impetus for some of our nation’s most substantial environmental laws, including the Clean Water Act and NEPA, as well as the 1978 amendments to OCSLA. The tragedy illustrates what can happen when oil and gas activities are not adequately regulated. Approving fracking and other unconventional well stimulation with little to no oversight only exacerbates those risks, and the risks inherent in such hazardous, environmentally damaging practices.

B. Environmental Harms and Risks from Fracking

On land, fracking, drilling and the resulting toxic wastewater have acquired an extensive track record of spills, accidents, leaks, pollution and property damage. The damages from fracking and drilling to air, water, wildlife and public health have been severe, and often irreversible. Experiences with onshore fracking, along with the added threats and stressors that conducting such activities offshore entails, demonstrate that this activity poses a grave and imminent threat when conducted in our oceans.

Water contamination is a particular hazard of fracking because hundreds of toxic chemicals are used in fracking fluids. And half of the oil platforms in the Santa Barbara Channel discharge all or a portion of their produced water, including fracking chemicals, into the ocean.⁹ The U.S. Environmental Protection Agency’s General National Pollutant Discharge Elimination System Permit for Offshore Oil and Gas Exploration, Development and Production Operations Off Southern California allows oil companies to dump more than 9 billion gallons of produced water a year into the Pacific Ocean.¹⁰ The General Permit has no limits on the amount of well stimulation chemicals that can be discharged when combined with produced water, and is inadequate to protect water quality.

When wastewater is not dumped into the ocean, it is reinjected into the seafloor or transported via pipelines or ships for onshore underground injection. This disposal method can result in leaks. For example, 30 percent of offshore oil wells in the Gulf of Mexico experienced well casing damage in the first five years after drilling, and damage increased over time to 50 percent after 20 years.¹¹ Loss of well casing integrity is one of the main pathways for contamination of ground and surface waters.

⁹ Environmental Protection Agency, Reissuance of National Pollutant Discharge Elimination System (NPDES) General Permit for Offshore Oil and Gas Exploration, Development and Production Operations Off Southern California, 79 Fed. Reg. 1643 (Jan 23, 2014).

¹⁰ *Id.*

¹¹ Vengosh, A. et al. 2014. A critical review of the risks to water resources from unconventional shale gas development and hydraulic fracturing in the United States. *Environmental Science & Technology* 48:8334-8348; Davies, R.J. et al. 2014. Oil and gas wells and their integrity: Implications for shale and unconventional resource exploitation. *Marine and Petroleum Geology* 56:239-254.

While the oil and gas industry has largely evaded disclosing all of the chemicals used in fracking operations, what is known is cause for great alarm. For example, a 2013 Congressional Report that sampled data from incomplete industry self-reports found that “[t]he oil and gas service companies used fracking products containing 29 chemicals that are (1) known or possible human carcinogens, (2) regulated under the Safe Water Drinking Act, or (3) listed as hazardous air pollutants under the Clean Air Act.”¹² A peer-reviewed study that examined fracking fluid products determined that more than 75 percent of the chemicals could affect the skin, eyes and other sensory organs, and respiratory and gastrointestinal systems; approximately 40 to 50 percent could affect the brain/nervous system, immune system, cardiovascular system and the kidneys; 37 percent could affect the endocrine system; and 25 percent could cause cancer and mutations.¹³ Another recent study found increased arsenic and heavy metals in groundwater near fracking sites in Texas.¹⁴

Air pollution from fracking is also well documented.¹⁵ Pollutants released during offshore fracking pose serious health risks, including carcinogenicity and endocrine disruption.¹⁶ Volatile organic compounds (“VOCs”) emitted during offshore fracking include the “BTEX compounds” – benzene, toluene, ethyl benzene and xylene – which Congress has declared Hazardous Air Pollutants.¹⁷ Many of these VOCs are associated with serious short-term and long-term effects to the respiratory, nervous and circulatory systems.¹⁸ Additionally, VOCs create ground-level ozone, or smog, which can contribute to asthma,¹⁹ premature death, stroke, heart attack and low birth weight. Benzene is also a known carcinogen,²⁰ and has been documented in people living within a 10-mile radius of fracked wells in Colorado,²¹ raising concerns about residents living within 10 miles of offshore rigs in California.

Offshore fracking can also result in airborne crystalline silica dust. While the most common exposure to silica dust is in workers close to silica sand, there are documented cases of

¹² United States House of Representatives, Committee on Energy and Commerce Minority Staff, et al., Human health risk assessment of air emissions from development of unconventional natural gas resources, *Sci. Total Environ.* (2012), at 8; *see also* Letter from Center for Biological Diversity to BOEM and BSEE, Oct. 3, 2013 at 4-12 (detailing detrimental impacts from fracking and other enhanced recovery techniques).

¹³ Colborn, Theo, et al. Natural Gas Operations for a Public Health Perspective, 17 *Human and Ecological Risk Assessment* 1039 (2011).

¹⁴ Fontenot, Brian E, et al. 2013. An evaluation of water quality in private drinking water wells near natural gas extraction sites in the Barnett Shale Formation. *Environmental Science & Technology*; U.S. GAO (2012) *Information on Shale Resources, Development, and Environmental and Public Health Risks*.

¹⁵ Colborn, T. et al. 2012. An exploratory study of air quality near natural gas operations. *Human and Ecological Risk Assessment* 20:86-105; McKenzie, L. et al. 2012. Human health risk assessment of air emissions from development of unconventional natural gas resources. *Sci Total Environ* 424:79-87.

¹⁶ Colborn, T. et al. 2011; McKenzie, L. et al. 2014. Birth outcomes and maternal residential proximity to natural gas development in rural Colorado. *Environmental Health Perspectives*, doi:10.1289/ehp.1306722; Food and Water Watch. 2012. Fracking: The New Global Water Crisis, March 7, 2012, downloaded at <http://www.foodandwaterwatch.org/reports/fracking-the-new-global-water-crisis-europe/>.

¹⁷ 42 U.S.C. § 7412(b).

¹⁸ Colborn, T. et al. 2011.

¹⁹ Jerrett, M. et al. 2009. Long-term ozone exposure and mortality. *N Engl J Med* 360:1085-1095.

²⁰ Gilman, J.B. et al. 2010. VOCs in the Greater Los Angeles Basin: Characterizing the gas-phase chemical evolution of air masses via multi-platform measurements during CalNEX, downloaded at www.esrl.noaa.gov/csd/projects/calnex/meetings/datawkshpMay2011/monday/Gilman.pdf.

²¹ Reutman, S.R. et al. 2002. Evidence of reproductive endocrine effects in women with occupational fuel and solvent exposures. *Environ Health Perspectives* 110:805-811; McKenzie, L. et al. 2014.

silica dust exposure and resultant harms suffered in neighboring communities.²² Silica quartz, commonly used in offshore frack jobs, can create dangerous health problems, including cancer and silicosis.²³

In addition to posing a significant risk to humans, fracking can kill or harm a wide variety of marine life, including some of California's most iconic wildlife species. Scientific research has indicated that 40 percent of the chemicals added to fracking fluids have been found to have ecological effects, indicating that they can harm aquatic animals and other wildlife.²⁴ And compared to fracking in other areas, oil companies in California use fracking fluids with more concentrated chemicals, including chemicals acutely toxic to mammals.²⁵

Such problems can be exacerbated when fracking chemicals break down, or are combined with other chemicals and environmental stressors. For example, some of the chemicals used in fracking operations can break down into nonylphenol, a very toxic substance with a wide range of harmful effects that include the development of intersex fish and altered sex ratios at the population level.²⁶ Nonylphenol can also inhibit the development, growth and survival of marine invertebrates, and has been shown to bioaccumulate in sea otters – a species listed as threatened under the federal Endangered Species Act.²⁷ In addition, when combined with other chemicals, some endocrine disruptors become more dangerous and produce effects even when the chemicals are below the threshold known to cause endocrine disruption.²⁸

Fracking chemicals raise especially grave ecological concerns in offshore operations because the waters where offshore fracking has occurred in federal waters – the Santa Barbara Channel – is important habitat for numerous species of whales, seabirds, sea turtles and fish. Between June and November, high densities of endangered blue whales spend time feeding on the abundant planktonic krill in the area of these oil and gas activities. In fact, blue whales have developed a particular affinity for the area such that the Santa Barbara Channel hosts the world's densest summer seasonal congregation of blue whales. Another endangered whale, the humpback whale, congregates in the area from May to September. Little is known about the elusive endangered fin whales; however, congregations have been observed near feeding

²² Mayer, S. 2010. Industrial dust plagues northwest residents. *Bakersfield Californian*, 26 December 2010, downloaded at <http://www.bakersfieldcalifornian.com/local/x1335105124/Two-ordered-to-trial-in-bodybuilders-death>; Bhaiga, L.J. 2012. Non-occupational exposure to silica dust. *Indian Journal of Occupational & Environmental Medicine* 16:3; Schenker, M.B. et al. 2009. Pneumoconiosis from agricultural dust exposure among young California farmworkers. *Environ. Health Perspectives* 117:6; Saiyed, H.N. et al. 1991. Non-occupational pneumoconiosis at high altitude villages in central Ladakh. *Br J Ind Med* 48:825-829.

²³ Wisconsin Department of Natural Resources. 2011. Report to Natural Resources Board: Silica Study; Raizner, J. 2013. Offshore Fracking Injuries. *Oil and Gas Monitor*, 13 September 2013, downloaded at www.oilgasmonitor.com/offshore-fracking-injuries/5919/.

²⁴ California Council on Science and Technology. 2014. Advanced Well Stimulation Technologies in California: An Independent Review of Scientific and Technical Information. August 28, 2014, available at <http://ccst.us/publications/2014/2014wst.pdf> ("CCST").

²⁵ California Council on Science and Technology. 2014. Advanced Well Stimulation Technologies in California: An Independent Review of Scientific and Technical Information. August 28, 2014, at 25. Downloaded at <http://ccst.us/publications/2014/2014wst.pdf>

²⁶ Diehl, J., et al. 2012. The distribution of 4-nonylphenol in marine organisms of North American Pacific Coast estuaries. *Chemosphere* 87:490-497.

²⁷ *Id.*

²⁸ CCST 2014 at 194.

aggravations of blue and humpback whales. Gray whales migrate through the region in the late fall on their way south to breeding grounds and again in the late winter and early spring on their way north to feeding areas, and minke whales are known to occupy the region year-round. And although rare, endangered sperm, right and killer whales occasionally occur in the area as well.

Further, the area where fracking has occurred is near federally designated critical habitat for imperiled black abalone and leatherback sea turtles, and near the Channel Islands Marine Sanctuary and Channel Islands National Park. “Located offshore from Santa Barbara and Ventura counties in southern California, the Sanctuary hosts a rich and diverse range of marine life and habitats, unique and productive oceanographic processes and ecosystems, and culturally significant resources.”²⁹ Similarly, the Channel Islands National Park was established “to protect nationally significant natural, scenic, wildlife, marine, ecological, archaeological, cultural, and scientific values of the Channel Islands.”³⁰

Fracking also increases the risk of earthquakes. Scientists have long known that oil and gas activities are capable of triggering earthquakes, with records of the connection dating back to the 1920s.³¹ More recent studies have drawn a strong connection between the recent rise in wastewater injection – the disposal method used by roughly half of the oil platforms in the Pacific OCS region – and increased earthquake rates.³² The U.S. Geological Survey recently recognized that wastewater disposal from fracking is a “contributing factor” to the six-fold increase in the number of earthquakes in Oklahoma.³³ Another recent study found that wastewater injection is responsible for the dramatic rise in the number of earthquakes in Colorado and New Mexico since 2001.³⁴ In fact, wastewater injection has been scientifically linked to earthquakes of magnitude three and greater in at least six states: Arkansas,³⁵ Colorado,³⁶ Ohio,³⁷ Oklahoma,³⁸ Texas³⁹ and New Mexico.⁴⁰ The largest of these earthquakes

²⁹ NOAA (2008) Channel Islands National Marine Sanctuary Final Management Plan/ Final Environmental Impact Statement at iii.

³⁰ 16 U.S.C. § 410ff.

³¹ National Research Council (2012) *Induced Seismicity Potential in Energy Technologies* at 3.

³² Van de Elst, Nicholas J. et al., Enhanced Remote Earthquake Triggering at Fluid-Injection Sites in the Midwestern United States, 341 *Science* 164 (2013).

³³ Sumy, D. F., et al. 2014. Observations of static Coulomb stress triggering of the November 2011 *M*5.7 Oklahoma earthquake sequence, *J. Geophys. Res. Solid Earth*, 119, 1904–1923, DOI:10.1002/2013JB010612; USGS, *Record Number of Oklahoma Tremors Raises Possibility of Damaging Earthquakes*, http://earthquake.usgs.gov/regional/ceus/products/newsrelease_05022014.php (May 2, 2014).

³⁴ Justin L. Rubinstein, et al. 2014. The 2001 – Present Induced Earthquake Sequence in the Raton Basin of Northern New Mexico and Southern Colorado. *Bulletin of the Seismological Society of America*, 2014 DOI: 10.1785/0120140009.

³⁵ E&E News, USGS, Okla. warn of more drilling-related earthquakes in State, Mike Soraghan. Oct. 25, 2013.

³⁶ *Id.*

³⁷ Ohio Dept. of Nat. Resources (2012) *Executive Summary: Preliminary Report on the Northstar 1 Class II Injection Well and the Seismic Events in the Youngstown, Ohio Area*; Fountain, Henry, Disposal halted at well after new quake in Ohio, *New York Times*, Jan. 1, 2012.

³⁸ Holland, Austin, Examination of possibly induced seismicity from hydraulic fracturing in the Eola Field, Garvin County, Oklahoma, Oklahoma Geological Survey Open-File Report OF1-2011 (2011).

³⁹ Frohlich, Cliff (2012) Two-year survey comparing earthquake activity and injection-well locations in the Barnett Shale, Texas. *Proceedings of the National Academy of Sciences*.

occurred near Prague, Oklahoma and had a magnitude of 5.7 – the biggest in the state’s history.⁴¹ It destroyed 14 homes, damaged a federal highway, injured two people, and was felt in 14 states.⁴² The risk that oil and gas drilling in California will cause an earthquake is a real threat, as over half of California’s 1,553 active and new wastewater injection wells are within ten miles of recently active faults, and at least 30 of California’s offshore wastewater injection wells are located within three miles of a fault. Dozens more wastewater injection wells line the southern California coast, often located close to one or more faults.⁴³

These are but a sampling of the numerous detrimental impacts from offshore fracking.⁴⁴ This toxic practice threatens to contaminate California’s air and ocean, endanger marine wildlife and compromise the safety and well-being of coastal communities. Nevertheless, BOEM and BSEE are allowing offshore fracking to occur with next to no oversight or analysis of the effects of such activities.

II. Legal Background

A. Outer Continental Shelf Lands Act

OCSLA prescribes a procedural framework under which the Department of the Interior may lease areas of the outer continental shelf (“OCS”) for purposes of exploring and developing the oil and gas deposits of the OCS’s submerged lands. 43 U.S.C. § 1331, *et seq.* Specifically, there are “four distinct statutory stages to developing an offshore oil well: (1) formulation of a 5-year leasing plan by the Department of the Interior; (2) lease sales; (3) exploration by the lessees; [and] (4) development and production. Each stage involves separate regulatory review that may, but need not, conclude in the transfer to lease purchasers of rights to conduct additional activities on the OCS.” *Sec’y of the Interior v. California*, 464 U.S. 312, 337 (1984). The agency must comply with NEPA and other environmental laws at each stage of the process. *Village of False Pass v. Clark*, 733 F.2d 605, 609 (9th Cir. 1984).

At the fourth stage of the process, OCSLA requires lessees to submit development and production plans (“DPPs”) to the Secretary of the Interior. 43 U.S.C. § 1351(a); *Sec’y of the Interior*, 464 U.S. at 337. The DPP must include a description of the specific work to be performed, all facilities and operations located on the OCS, the environmental safeguards that will be implemented and how those safeguards will be implemented, an expected rate of development and production and a time schedule for performance, among other requirements. 43 U.S.C. § 1351(c). OCSLA’s implementing regulations further define the requisite contents of a DPP. In particular, DPPs must also include detailed descriptions of the types, quantity and composition of wastes that will be generated by development and production activities; how such

⁴⁰ Rubinstein, J. L., et al. 2012. The 2001-present triggered seismicity sequence in the Raton Basin of southern Colorado/Northern New Mexico, Abstract S34A-02 presented at 2012 Fall Meeting, AGU, San Francisco, Calif. Dec. 3-7, 2012.

⁴¹ Kearnen, K.M. et al. 2013. Potentially induced earthquakes in Oklahoma, USA: links between wastewater injection and the 2011 M_w 5.7 earthquake sequence. *Geology* 41:699-702.

⁴² *Id.*

⁴³ FracTracker.org, <http://maps.fractracker.org/latest/?webmap=99ae030fd5844eadb3d14398cbcdafbd>

⁴⁴ See Letter from Center for Biological Diversity to BOEM and BSEE, Oct. 3, 2013 at 4-12 (detailing detrimental impacts from fracking and other enhanced recovery techniques).

wastes will be disposed of; the frequency, duration and amount of emissions of VOCs and other pollutants that will be generated by development and production activities; and mitigation measures designed to avoid or minimize the take of protected species if there is reason to believe that protected species may be incidentally taken by planned development and production activities, among other information. 30 C.F.R. §§ 550.241-550.262.

Additionally, the Secretary must forward the plan to the governor of any affected state for comment and review. 43 U.S.C. § 1351(a)(3). The governor's recommendations regarding the scope of activities conducted under the plan, and any modifications, must be accepted. *Id.* § 1345(c). The DPP must also be consistent with the applicable state coastal management program. The state can reject the plan as inconsistent with its management plan, and the veto can be overridden only by the Secretary of Commerce. *Id.* § 1351(d). A plan may also be disapproved, and the lease cancelled, if implementation of the plan "would probably cause serious harm or damage to life (including fish and other aquatic life)... or to the marine, coastal or human environments." *Id.* § 1351(h)(1)(D)(i), (2).

OCSLA also mandates that the Secretary of the Interior periodically review DPPs. 43 U.S.C. § 1351(h)(3). The reviews are to be based on changes in available information, or other onshore or offshore conditions that impact development and production. *Id.* § 1351(h)(3). If such review indicates that the DPP should be revised to ensure the plan complies with OCSLA, the Secretary must require such revision. *Id.* § 1351(h)(3). OCSLA regulations require revision of DPPs when a company proposes to, *inter alia*, change the type of production or significantly increase the volume of production; increase the emissions of an air pollutant to a degree that exceeds the amount specified in the approved plan; or significantly increase the amount of solid or liquid wastes to be handled or discharged. 30 C.F.R. § 550.283(a). The regulations also require a company to supplement a DPP when it proposes to conduct activities that require approval of a license or permit which is not described in the approved DPP. *Id.* § 550.283(b).

In addition, OCSLA vests the Secretary of the Interior with the authority to require oil and gas companies to obtain a permit prior to engaging in drilling activities under an approved DPP. OCSLA's implementing regulations require an oil company to obtain approval of an application for permit to drill ("APDs") prior to conducting any drilling activities under an approved DPP. 30 C.F.R. § 550.281(a). The regulations specify that the activities proposed in an APD "must conform to the activities described in detail" in an approved DPP. *Id.* § 550.281(b). The regulations also provide for approval of drilling activities via approval of an application for permit to modify ("APM") when a company intends to revise its drilling plan. *Id.* § 250.465(a).

Finally, OCSLA gives the Secretary of the Interior the authority to order the suspension of all development and production activities "if there is a threat of serious, irreparable, or immediate harm or damage to life (including fish and other aquatic life)...or to the marine, coastal, or human environment" among other reasons. 43 U.S.C. § 1334(a)(1); *see also* 30 C.F.R. § 250.172 (OCSLA regulations authorizing suspensions of operations for the same reason).

The Secretary of Interior has delegated its authority under OCSLA to BOEM and BSEE. BOEM is responsible for managing and approving DPPs. BSEE is responsible for enforcing safety and environmental regulations, and managing all field operations, including reviewing, approving and compiling conditions for APDs and APMs.

B. National Environmental Policy Act

NEPA, America's "basic national charter for protection of the environment," 40 C.F.R. § 1500.1(a), requires federal agencies to take a "hard look" at the environmental consequences of their actions before taking action. *Kleppe v. Sierra Club*, 427 U.S. 390, 410, n. 21 (1976); 40 C.F.R. § 1500.1(a). In this way, NEPA ensures that federal agencies "will have available, and will carefully consider, detailed information concerning significant environmental impacts" and that such information "will be made available to the larger [public] audience that may play a role in both the decisionmaking process and the implementation of the decision." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989).

Under NEPA, a federal agency must prepare an environmental impact statement ("EIS") for all "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C). NEPA's implementing regulations specify factors that must be considered in determining when an action may significantly affect the environment warranting an EIS. *See* 40 C.F.R. § 1508.27(b). Whether an action may have "significant" impacts on the environment is determined by considering the "context" and "intensity" of the action. *Id.* § 1508.27. "Context" means the significance of the project "must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality." *Id.* § 1508.27(a). The intensity of the action is determined by considering the ten factors enumerated in the regulations, which include: (1) impacts that may be both beneficial and adverse; (2) the degree to which the proposed action affects public health or safety; (3) unique characteristics of the geographic area such as proximity to ecologically critical areas; (4) the degree to which the effects on the human environment are likely to be highly controversial; (5) the degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks; (6) the degree to which the action may establish a precedent for future actions with significant effects; (7) whether the action is related to other actions with individually insignificant but cumulatively significant impacts; (8) the degree to which the action may cause loss or destruction of significant scientific, cultural, or historical resources; (9) the degree to which the action may adversely affect an ESA-listed species or its critical habitat; and (10) whether the action threatens a violation of federal, state or local environmental laws. *Id.* § 1508.27(b)(1)-(10). The presence of even just "one of these factors may be sufficient to require preparation of an EIS in appropriate circumstances." *Ocean Advocates v. U.S. Army Corps of Eng'rs*, 402 F.3d 846, 865 (9th Cir. 2005).

NEPA's regulations provide that an agency may first prepare an environmental assessment ("EA") aimed at determining whether the environmental impact of a proposed action is "significant," warranting preparation of an EIS. 40 C.F.R. § 1501.3. If, pursuant to the EA, an agency determines that an EIS is not required, it must issue a "finding of no significant impact" which briefly presents the reasons why the proposed agency action will not have a significant impact on the human environment." *Id.* §§ 1501.4(e), 1508.13.

A federal agency may also adopt a "categorical exclusion" for "a category of actions which do not individually or cumulatively have a significant effect on the environment." *Id.* § 1508.4. Typically, if a federal action falls within an agency's adopted categorical exclusion, it is not required to prepare an EIS or EA. *Id.* § 1508.4. However, an agency invoking a categorical

exclusion must “provide for extraordinary circumstances in which a normally excluded action may have a significant environmental effect.” *Id.* § 1508.4. In such circumstances, a typically “excluded action would nevertheless trigger preparation of an EIS or an EA.” *State of California v. Norton*, 311 F.3d 1162, 1168 (9th Cir. 2002). “[T]he fact that the exceptions *may apply* is all that is required to prohibit the use of the categorical exclusion.” *Id.* at 1177 (emphasis added).

C. Coastal Zone Management Act

In enacting CZMA in 1972, Congress found that the “increasing and competing demands upon the lands and waters of our coastal zone” had “resulted in the loss of living marine resources, wildlife, nutrient-rich areas, permanent and adverse changes to ecological systems, decreasing open space for public use, and shoreline erosion.” 16 U. S. C. § 1451(c). Accordingly, CZMA seeks “to protect and to give high priority to natural systems in the coastal zone” and thereby prevent “[i]mportant ecological, cultural, historic, and esthetic values in the coastal zone...[from] being irretrievably damaged or lost.” *Id.* § 1451(e), (h).

To reach these goals, CZMA enhances the ability of coastal states to assume planning and regulatory powers over their coastal zone. *Id.* § 1451(m). Specifically, CZMA authorizes states with federally approved coastal management programs to review applications for federal licenses or permits to conduct activities in, or outside of, the coastal zone that affect land uses, water uses or natural resources within the coastal zone to ensure the activity is fully consistent with the state’s management plan. *Id.* § 1456(c)(1), (3); *see also* 15 C.F.R. § 930.53(a) (effects on the coastal zone includes “reasonably foreseeable effects”). California has a federally approved coastal management program, pursuant to which the California Coastal Commission is charged with making consistency determinations. *American Petroleum Institute v. Knecht*, 456 F.Supp. 889, 895 (C.D. Cal. 1978); Cal. Pub. Res. Code § 30008.

In recognition of the fact that offshore oil and gas activities impact coastal resources, CZMA expressly requires consistency review of DPPs. 16 U.S.C. § 1456(c)(3)(B). The federal government cannot issue permits under a DPP unless and until the DPP is deemed consistent with the state’s management program. *Id.* § 1456(c)(3)(B). If the state determines the DPP is inconsistent with its plan, CZMA prohibits the federal government from issuing any permit under the DPP, unless the Secretary of Commerce overturns the determination after finding that the activity to be permitted complies with the objectives of CZMA or is necessary for national security. *Id.* § 1456(c)(3)(B).

Moreover, CZMA’s implementing regulations make clear that changes to a previously reviewed and approved DPP, as well as approval of APDs and APMs, must be subject to additional consistency review when they represent a “major amendment” to an approved DPP. 15 C.F.R. § 930.51(a), (b). What constitutes a “major amendment” depends on whether the particular activity to be conducted under the license or permit received prior CZMA review. A “major amendment” of an activity that did not receive prior review is one that will “affect any coastal use or resource,” *id.* § 930.51(b)(1), while a “major amendment” of an activity that received prior CZMA review is one that will “cause an effect on any coastal use or resource substantially different than those originally reviewed.” *Id.* § 930.51(b)(3). Whether an effect is “substantially different” is to be made on a case-by-case basis after consultation with the state. *Id.* § 930.51(b)(e). The regulations specifically require that the terms “major amendment” and

“substantially different” “be construed broadly to ensure that the state...has the opportunity to review activities and coastal effects not previously reviewed.” *Id.* § 930.51(b)(e).

III. Legal Violations

Allowing fracking – a hazardous and toxic activity – to occur in the delicate offshore environment is reckless and irresponsible in and of itself. The fact that BOEM and BSEE⁴⁵ are allowing fracking and other unconventional well stimulation to occur off the coast of California without requiring the oil companies to describe such practices in their development plans, without conducting any environmental review of the potential impacts from such activities, and without any input from the state or its citizens regarding whether such activities are consistent with the state’s coastal program adds insult to injury, and violates a myriad of laws in the process.

Accordingly, this letter requests that BOEM and BSEE halt all activities involving fracking and other unconventional well stimulation and their approvals of such activities until BOEM and BSEE come into compliance with each of these laws. If BOEM and BSEE fail to do so, the Center will be forced to seek a judicial remedy in federal court for each of the violations described below.

A. Violations of the Outer Continental Shelf Lands Act

1. BOEM’s Failure to Review and Require Revision of DPPs Violates OCSLA

OCSLA expressly requires the Secretary of the Interior to periodically review approved DPPs, and to require revision of such plans if its review determines revision is necessary. 43 U.S.C. § 1351(h)(3). Similarly, OCSLA’s implementing regulations also require “periodic[] review” of DPPs and state that such review may lead to a requirement to revise a DPP. 30 C.F.R. § 550.284(a), (b). The circumstances triggering the requirement to revise such plans include a change in the type of production or a significant increase in the volume of production; an increase in the emissions of an air pollutant to a quantity that exceeds the amount specified in the approved plan; or a significant increase in the amount of solid or liquid wastes to be handled or discharged. *Id.* § 550.283(a). The regulations also require a company to supplement a DPP when it proposes to conduct activities that require approval of a license or permit which is not described in the approved DPP. *Id.* § 550.283(b).

The Secretary of the Interior has delegated this particular duty to BOEM. *See id.* § 550.284. But BOEM has not reviewed, nor required revision of, the DPPs for the platforms where fracking and other unconventional well stimulation have occurred. This is despite the fact that the DPPs *are decades old*, the use of fracking constitutes new information, and fracking

⁴⁵ Some of the violations of law outlined in this letter occurred prior to the Secretary of the Interior’s order dividing the Mineral Management Service (“MMS”) into three entities – BOEM, BSEE and the Office of Natural Resources Revenue – and prior to the order renaming MMS the Bureau of Ocean Energy Management, Regulation and Enforcement (“BOEMRE”). Sec. Order No. 3299 (May 19, 2010). Though this letter refers to the violations of law as being committed by BOEM and BSEE, such violations also apply to actions and inactions on the part of MMS and BOEMRE where relevant.

meets several of the triggers for when revisions are required under OCSLA regulations. In particular, fracking increases the degree and composition of air emissions, significantly increases the amount and composition of wastewater, and significantly increases the volume of production. BOEM's failure to review and require revision of the DPPs for the companies that have engaged in fracking and other unconventional well stimulation therefore violates its nondiscretionary duties under OCSLA. 43 U.S.C. § 1351(h)(3).

2. BSEE's Approval of Permits that Allow Fracking Violates OCSLA

OCSLA establishes a detailed process pursuant to which drilling on the OCS is permitted. The last stage of that process – the development and production stage – requires the compilation and approval of a DPP that details the particular activities in which a company intends to engage, the liquid wastes and air emissions generated by these activities, and any necessary mitigation measures. The process helps to ensure, *inter alia*, that “environmental safeguards” are in place and helps to “balance orderly energy resource development with protection of the human, marine, and coastal environments.” 43 U.S.C. §§ 1332(3), 1802(2)(B).

Accordingly, OCSLA's implementing regulations specify that in order to obtain an APD or an APM to conduct drilling activities under an approved DPP, the activity must “be described in detail” in that particular plan. 30 C.F.R. § 550.281(b). But, as the public learned just last summer, BSEE has been approving APDs and APMs that involve fracking and other unconventional well stimulation for years, despite the fact that the DPPs for the platforms from which such activities will be conducted do not even mention the practices, let alone “describe [them] in detail.” And, as explained above, fracking also meets several of the triggers requiring revision or supplementation of an approved DPP – it increases the type and quantity of air emissions, significantly increases the amount and composition of wastewater, and significantly increases the volume of production. But no revisions to the DPPs have occurred.

BSEE's approval of each of the APDs and APMs in Table 1, as well as its approval of any other APDs or APMs involving fracking and other unconventional well stimulation, is therefore arbitrary, capricious and violates OCSLA. Similarly, BSEE's pattern and practice of approving permits to engage in fracking and other unconventional well stimulation when those activities are not described in detail in DPPs is arbitrary, capricious and violates OCSLA.

B. Violations of the National Environmental Policy Act

NEPA requires federal agencies to take a “hard look” at the environmental consequences of their actions *before* taking action. *Kleppe v. Sierra Club*, 427 U.S. 390, 410, n. 21 (1976); 40 C.F.R. § 1500.1(a). To comply with this mandate, a federal agency must prepare an EIS for all “major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C). NEPA's implementing regulations specify factors that must be considered in determining when an action may significantly affect the environment warranting an EIS. 40 C.F.R. § 1508.27(b)(1)-(10). Fracking implicates several of the NEPA significance factors – it affects public health and safety, involves unique and unknown risks, involves controversy, may impact ecologically critical areas, and may negatively impact several ESA-listed species and

their critical habitats. But rather than preparing an EIS, BSEE is approving APDs and APMs involving fracking pursuant to a categorical exclusion. *See* 516 DM 15.4 C(12).

BOEM and BSEE may not lawfully approve fracking under a categorical exclusion, as fracking an offshore oil or gas well has clear and obvious environmental impacts necessitating preparation of an EIS. Moreover, on its face, the categorical exclusion only applies when an activity approved via an APD or APM will be mitigated in accordance with the measures described in an approved DPP. *See* 516 DM 15.4 C(12). The relevant DPPs do not even mention fracking, let alone mitigate the impacts from such activities. As such, BSEE's reliance on the categorical exclusion to approve the APDs and APMs in Table 1, and any other APDs or APMs involving fracking and other unconventional well stimulation, is arbitrary, capricious and violates NEPA.

Further, even if approval of fracking a well could be shoehorned into a category eligible for a categorical exclusion (which it cannot), fracking and other unconventional well stimulation constitute an "extraordinary circumstance" for which a categorical exclusion cannot be invoked. As required by NEPA's implementing regulations, 40 C.F.R. § 1508.4, the Department of the Interior has identified "extraordinary circumstances" in which categorical exclusions may not be used. *See* 516 DM 2, Appendix 2; 43 C.F.R. § 46.215. The circumstances encompass each of the significance criteria expressed in NEPA regulations, 40 C.F.R. § 1508.27(b)(1)-(10), including the proximity of the activity to an ecologically critical area, its threat to public health and safety, the controversial nature of the activity, the uncertainty of its effects, and its potential impacts on endangered and threatened species. *See* 516 DM 2, Appendix 2; 43 C.F.R. § 46.215. Accordingly, the approval of APDs and APMs involving fracking requires a full, thorough review that will inform decisionmaking and allow full public vetting. By failing to issue an EIS or EA before authorizing the APDs and APMs in Table 1, or before approving any other APDs or APMs involving fracking and other unconventional well stimulation, BSEE is in violation of NEPA. Similarly, BSEE's pattern and practice of approving fracking and other unconventional well stimulation by relying on a categorical exclusion also violates NEPA.

3. Violations of the Coastal Zone Management Act

One of CZMA's primary functions is to ensure that coastal states and their citizens have a say in whether activities that affect coastal zones and their unique natural and cultural resources should be allowed to occur. *See* 16 U.S.C. § 1451(m). Accordingly, CZMA specifically requires the federal government to involve states in the planning of the exploration, development and production of oil and gas on the OCS, and prohibits the issuance of drilling permits unless and until the state determines that the activities to be conducted under those permits are consistent with their coastal management programs. *Id.* § 1456(c)(3)(B).

However, because of the way in which BSEE has been approving fracking and other unconventional well stimulation, the California Coastal Commission has never reviewed such activities for consistency with California's Coastal Management Program.⁴⁶ In fact, the Commission only became aware that fracking was occurring in federal waters off the coast of California in the summer of 2013, when journalists brought the situation to the public's attention.

⁴⁶ Letter from California Coastal Commission to BOEM/BSEE, June 16, 2014.

Although the Commission long-ago reviewed the DPPs for the platforms where fracking is known to have occurred – Platforms Hidalgo, Gilda and Gail – for consistency with California’s program, none of these plans describe or even mention fracking. And, as described above, fracking clearly affects California’s coastal resources. Thus, APDs and APMs approving fracking constitute “major amendments” under CZMA subject to additional consistency review. *See* 15 C.F.R. § 930.51(a), (b).

But instead of engaging the state and its citizens on the approval of such activities as required by CZMA, BSEE has developed a pattern and practice of approving APDs and APMs without any public notice or notice to the California Coastal Commission – thereby evading the requisite consistency review under CZMA. BSEE’s approval of the APDs and APMs in Table 1 without a consistency determination, and its approval of any other APDs or APMs involving fracking and other unconventional well stimulation violate CZMA, as does its pattern and practice of failing to process such permits “major amendments.”

IV. Conclusion

The Center welcomes the opportunity to discuss how the Secretary, BOEM and BSEE might resolve these ongoing violations without the need for litigation. An appropriate remedy that would prevent the need for litigation would be for BOEM to review and require revision of the DPPs for oil companies that have engaged, or plan to engage, in offshore fracking and other unconventional well stimulation, and to initiate the NEPA and CZMA review processes. Meanwhile, BSEE must require cessation of all fracking activities and must stop approving APDs and APMs that involve fracking and other unconventional well stimulation unless and until BOEM and BSEE conduct a comprehensive analysis of such activities under NEPA, and such actions receive a consistency determination under CZMA. If, however, the Secretary, BOEM and BSEE do not remedy these violations, the Center will initiate litigation in federal court to resolve the matter.

If you have any questions, wish to meet to discuss this matter, or feel this notice is in error, please feel free to contact the Center at the numbers provided below. Thank you.

Sincerely,



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I hereby declare under penalty of perjury that, to the best of my knowledge and belief, the foregoing is true and correct.

Dated this 4th Day of December, 2014

Kristen Monsell
Center for Biological Diversity