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Negative Brief: Exporting Oil to South Korea

NEGATIVE PHILOSOPHY

Nothing wrong with 1970s-era oil export ban: It’s still good policy today

Sen. Robert Menendez 2013 (D-NJ) 16 Dec 2013 Menendez to Obama: Expanding Crude Exports Only Enhances Big Oil Profits <http://www.menendez.senate.gov/news-and-events/press/menendez-to-obama-expanding-crude-exports-only-enhances-big-oil-profits>

When Congress first enacted limits on crude exports in the 1970s following the oil embargo, these laws were designed to enhance American energy security and protect U.S. consumers from volatility and price spikes. Despite changes in the global energy market, these goals should remain priorities in our nation's energy policy. Easing this ban might be a win for Big Oil, but it would hurt American consumers.

INHERENCY

1. The “Condensate” loophole

US already exporting oil to S. Korea thanks to the “condensate” loophole

Wall Street Journal 2014. (journalists Christian Berthelsen and Lynn Cook) 30 July 2014 “U.S. Oil Exports Ready to Sail” <http://www.wsj.com/articles/oil-shipment-cracks-decades-old-ban-1406762293>

A tanker of oil from Texas set sail for South Korea late Wednesday night, the first unrestricted sale of unrefined American oil since the 1970s. How that $40 million shipment avoided the nearly four-decade ban on exporting U.S. crude is a tale involving two determined energy companies, loophole-seeking lawyers, and an unprecedented boom in American drilling that could create a glut of ultralight oil. The Singapore-flagged BW Zambesi is the first of many ships likely to carry U.S. oil abroad under a new interpretation of the federal law that bars most sales of American oil overseas. Analysts say future exports appear wide open: as much as 800,000 barrels a day come from just one of the many U.S. oil fields pumping light oil. Though U.S. policy on oil exports hasn't changed, production of this kind of oil, known as condensate, is surging. This early shipment "is the wedge that's pushing the door open" for more ultralight oil exports, said Daniel Yergin, vice chairman of consulting firm IHS.

“Condensate/Distillation” loophole allows exports, and oil producers are using the loophole

**Analysis: “Condensate” is crude oil that was in gaseous form underground (under pressure) but then becomes liquid when extracted. By taking this condensate (which might not meet the definition of “crude oil”) and running it through a very brief “distillation” process (now for sure it isn’t crude, since it has been processed), oil companies can circumvent the crude oil export ban, because distilled condensate isn’t crude oil and therefore isn’t banned.**

Phillip Brown, Robert Pirog, Adam Vann, Ian Fergusson, Michael Ratner & Jonathan Ramseur 2014. (All are with Congressional Research Service: Brown - Specialist in Energy Policy. Pirog - Specialist in Energy Economics. Vann - Legislative Attorney. Fergusson - Specialist in International Trade and Finance. Ratner - Specialist in Energy Policy. Ramseur - Specialist in Environmental Policy) 31 Dec 2014 U.S. Crude Oil Export Policy: Background and Considerations <https://www.fas.org/sgp/crs/misc/R43442.pdf>

Finally, the BIS crude oil definition states that crude oil hydrocarbons that have not passed through a distillation tower are subject to export restrictions. In order to comply with the regulation, investments are being made to install standalone condensate splitters—essentially a basic distillation tower—that separate the components (e.g., naphtha) of condensate. The resulting condensate components are eligible for export to international markets. In June 2014, the Bureau of Industry and Security ruled that processed condensate through a stabilizer/distillation unit can be exported without requiring a license. This decision sparked much debate about whether this represents a change in policy or an administrative ruling within the existing regulatory framework. It is important to note that the BIS crude oil definition is open to interpretation, and it is likely that the industry will pursue avenues within existing regulations to maximize the amount of minimally processed crude oil and condensate that can be exported. For additional information about the BIS processed condensate commodity classifications, see Appendix C. As a result of the above considerations, some industry stakeholders have called for condensate to be removed from the BIS definition. Some producers have begun self-classifying processed condensate and will be exporting more of this material in the absence of a commodity classification or a license from BIS.

2. Alaska oil exported to S. Korea

WALL STREET JOURNAL 2014 (journalists CHRISTIAN BERTHELSEN and NICOLE FRIEDMAN) 30 Sept 2014 Conoco Ships Alaska Oil to South Korea as Exports Climb <http://www.wsj.com/articles/conoco-ships-alaska-oil-to-south-korea-as-exports-climb-1412094642>

ConocoPhillips has started exporting oil from Alaska, the first such shipment in a decade, as sales of U.S. crude to foreign buyers continue to mount. Rising exports—despite legal constraints that date to the 1970s—reflect the soaring amount of petroleum being pumped from U.S. shale formations through hydraulic fracturing. The fracking boom is overwhelming pipelines and refineries and causing the price of U.S. oil to weaken, from Texas to North Dakota to Alaska. The price drop is particularly troublesome for Alaska, which generates much of its revenue from oil taxes. The Alaskan oil is destined for a refinery in South Korea, according to Genscape, an energy data service that tracks tanker movements. The shipment contained about 800,000 barrels, a person familiar with the matter said. The value would be about $75 million at Alaskan crude prices as posted by the U.S. Energy Information Administration.

HARMS / SIGNIFICANCE

Oil supplies aren’t a problem: World has a glut of cheap oil right now

Myra P. Saefong and Eric Yep  2015 (journalists) MORNINGSTAR 14 Sept 2015 UPDATE: Oil futures settle at a more than 2 week low <http://www.morningstar.com/news/market-watch/TDJNMW_20150914205/update-oil-edges-lower-as-china-data-spark-worries-about-demand.html>

Oil futures settled at their lowest level in more than two weeks on Monday as data showing weaker-than-expected industrial production in China and a decline for Shanghai's stock market raised concerns that demand for crude from the world's second-largest consumer will weaken. Traders also braced for more volatility and possibly lower oil prices in coming weeks. Goldman Sachs Group Inc. said last week (http://www.marketwatch.com/story/goldman-warns-oil-could-sink-to-20-a-barrel-2015-09-11) that U.S. oil prices could fall to as low as $20 a barrel to clear out a global supply glut.

SOLVENCY

1. US oil refineries aren’t saturated

**Analysis: This means US refineries have enough capacity to take in more US crude oil. There’s no glut of US oil sitting around that needs to be exported under the theory that we can’t do anything else with it.**

Prof. Jason Bordoff and Trevor Houser 2015. (Bordoff – former Special Assistant to the President and Senior Director for Energy and Climate Change on the Staff of the National Security Council; currently professor of professional practice at Columbia’s School of International and Pub­lic Affairs. Houser – attorney with the Rhodium Group (RHG) and leads the firm’s energy and natural resources practice; serves on the US Trade Representative’s Trade and Environment Policy Advisory Committee) Columbia Univ Center on Energy Policy, 16 Jan 2015 “Navigating the US Oil Export Debate” <http://energypolicy.columbia.edu/sites/default/files/energy/Navigating%20the%20US%20Oil%20Export%20Debate_January%202015.pdf> (brackets added)

Estimating exactly how much additional US LTO [light tight oil] pro­duction can be absorbed by domestic refineries without significant yield declines or capacity additions is chal­lenging. Refinery consultants Turner Mason estimate that absent additional refinery investment, the domestic market will reach saturation on a nonseasonal basis when crude production reaches 10 to 11 million b/d [barrels per day]. This is similar to the findings of recent studies by consultancies ICF and NERA. When will that occur? In November 2014 US crude production was 9.1 million b/d. In the Reference case of their 2014 Annual Energy Outlook, the EIA [US Dept of Energy’s Energy Information Administration] sees US crude production peaking at 9.6 million b/d in 2019, never reaching Turner Mason’s estimated point of satura­tion. In the EIA’s High Oil and Gas Resource side case, which has been a better predictor of US crude produc­tion in recent years than the Reference case, output passes 10 million b/d in 2016. US oil production passes 10 million b/d that year in a number of private sector fore­casts, including Citigroup, Goldman Sachs, and energy consultancy Rystad. Other research puts the point of sat­uration lower than 10 million b/d. A recent study from energy consultancy IHS, for example, estimates that mar­ket saturation will occur at between 9 and 10 million b/d of domestic crude production. Since these production estimates were made, there has been a sharp drop in both US and global oil prices. Brent prices have fallen from a high of $115 per barrel in June 2014 to below $65 a barrel as of mid-December 2014. WTI prices have fallen from $108 per barrel to below $60 over the same period. It is too early to assess the magnitude of the impact of this decline in oil pric­es (if sustained) on the US crude production outlook, but directionally it will reduce production growth and delay the point at which the domestic market reaches saturation.

2. US oil exports won’t necessarily help the S. Korean economy much

Prof. Younkyoo Kim 2015(Professor in the Division of International Studies and Director of the Center for Energy Governance and Security at Hanyang University in Seoul, S. Korea) 14 May 2015 “The Impact of Low Oil Prices on South Korea“ <http://www.nbr.org/research/activity.aspx?id=562>

On the other hand, GS Caltex has experienced losses since the rise of U.S. shale, largely because U.S. shale is mainly light tight oil and does not require the type of refinement offered by Caltex. Another potential blow for the company is the Keystone XL pipeline. If finished, the pipeline will transport Canadian tar sands production to the Gulf of Mexico to be refined in the United States. Coupled with low oil prices and increased volatility in the market, this project has caused many in the South Korean energy industry to become concerned about future security and begin searching for long-term stability. Lower oil prices will boost the competitiveness of South Korean exports, but not all industries will benefit. The petrochemical industry and heavy industry, for example, will be less profitable. If oil prices are also being affected by the sluggish growth of the global economy, then the positive impact on the South Korean economy will be limited.

3. No benefit to world oil markets

Removing US export constraints would not reduce world oil prices significantly, only increase US oil prices

Dr. Michael Levi 2014 (PhD in war studies from Univ of London;  Senior Fellow for Energy and the Environment at Council on Foreign Relations and Director of the Maurice R. Greenberg Center for Geoeconomic Studies) 8 Sept 2014 The Impact of Oil Exports Is Being Greatly Exaggerated <http://blogs.cfr.org/levi/2014/09/08/the-impact-of-oil-exports-is-being-greatly-exaggerated/>

Now imagine that those constraints were removed. Friedman says that oil prices could plummet by $15 to $25 dollars. Suppose for a moment that he’s correct. The Brent price would drop to $75 to $85 a barrel. The LLS price would remain a few dollars below that (mostly reflecting transportation costs) at, say, $72 to $82. Now take another look at the chart above: This would mean that U.S. oil prices would drop by between $7 and $22. The most obvious result of this would be to depress U.S. oil production relative to what it otherwise would have been. But now stop for a moment: We are predicting a world in which oil production is lower and oil prices have also dropped. This makes zero sense: less oil production results in *higher*prices – not lower ones. Friedman’s claim about oil exports and oil prices quickly leads to a logical impossibility. The only possible conclusion is that Friedman is wrong. That this is the correct conclusion can be seen by looking at what allowing oil exports would actually do to the global price of oil. As a basic rule, when you connect two markets where a commodity is selling at different prices, the common price that results is somewhere between the two. So further liberalization of oil exports should reduce Brent prices by at most a few dollars a barrel; anything more and Brent (plus transportation costs) would suddenly become *cheaper* than LLS. In actual practice the impact is likely to be considerably smaller, with most of the adjustment coming from higher U.S. oil prices rather than lower world ones.

DISADVANTAGES

1. US Consumers harmed

Exporting oil would raise US prices: We should prioritize well-being of American families ahead of oil company profits

Sen. Robert Menendez 2013 (D-NJ) 16 Dec 2013 Menendez to Obama: Expanding Crude Exports Only Enhances Big Oil Profits <http://www.menendez.senate.gov/news-and-events/press/menendez-to-obama-expanding-crude-exports-only-enhances-big-oil-profits>

As you know, the world price of oil (otherwise known as the Brent crude price) is currently about $110 per barrel, while the American price is about $97 per barrel. The threshold question then, is why would we want to export oil and raise American oil prices to match the world's oil price? Big Oil clearly wants to pad their record profits and fetch a higher price for their oil. But considering that the five largest publicly traded oil companies made $118 billion in profits last year, I think they are doing just fine. I believe we should be more worried about the bottom line for American families.

Oil exports will enrich Big Oil companies at the expense of American consumers

Sen. Robert Menendez 2013 (D-NJ) 16 Dec 2013 Menendez to Obama: Expanding Crude Exports Only Enhances Big Oil Profits <http://www.menendez.senate.gov/news-and-events/press/menendez-to-obama-expanding-crude-exports-only-enhances-big-oil-profits>

We must continue to keep domestically-produced crude here to lower prices for consumers, while aggressively working towards clean and renewable alternatives. Allowing for expanded crude exports would serve only to enhance the profits of Big Oil, and could force U.S. consumers to pay even more at the pump. I urge you to reject any attempts to send more U.S.-produced crude oil abroad, and thank you for your attention to this important matter.

Blocking exports is key to lowering US gasoline prices, helping working class families on tight budgets

Sen. Robert Menendez 2013 (D-NJ) 16 Dec 2013 Menendez to Obama: Expanding Crude Exports Only Enhances Big Oil Profits <http://www.menendez.senate.gov/news-and-events/press/menendez-to-obama-expanding-crude-exports-only-enhances-big-oil-profits>

As our nation continues on the path to economic recovery, it is critical that we support working class families who are carefully budgeting every dollar. According to the U.S. Energy Information Administration, U.S. households are spending nearly $3,000 a year on gasoline. Over the last ten years, American consumers have seen average gas prices rise from approximately $1.50 a gallon in 2003 to approximately $3.50 per gallon today. Crude oil that is produced in the U.S. should be used to lower prices here at home, not sent to the other side of the world.

Quantified Impact: Over $10 billion per year saved by US consumers with the export ban in place

Paul Cheng 2015 (Chartered Financial Analyst with Barclay’s Investment Bank Research) 13 May 2015 Crude Export Ban: Impact on Gasoline Prices, 2015 Edition <http://crudecoalition.org/app/uploads/2015/02/ENERGY_CRUDE_EXPORT_BAN__1035047681.pdf>

We believe that policymakers will be cautious to amend or adopt a full repeal of the U.S. crude export ban unless there is a clear benefit to American consumers. Arguments led by oil producers themselves are unlikely to provide enough incentives and political cover for policymakers unless they can clearly demonstrate an incremental benefit to consumers (potentially in the form of employment or product pricing), in our opinion. This report is an update of a previous report from early 2014. In this report, we expand the comparison to include 2014 data as well as adding New York Harbor and Los Angeles prices into the mix. Despite the expanded data set, the conclusion has remained largely the same: US consumers have been receiving a partial dividend in the form of lower gasoline prices. Domestic crude discounts have been partially passed through to the consumer in the form of lower product pricing: Between 2008 and 2010, we estimate U.S. average gasoline prices were approximately $4.7/bl higher than Northwest European premium gasoline prices. In comparison, between 2011 and 2014, the U.S. average price was approximately $1.6/bl higher than Northwest Europe, while last year the U.S. price was just $1.2/bl higher. This implies U.S. consumers compared to their European counterparts have received a partial dividend for the crude export ban of an average of $3.1/bl in discounted gasoline prices since 2011 and a discount of $3.5/bl in 2014. The annual economic benefit of crude discounts to U.S. consumers is potentially greater than $10.2 billion: We estimate U.S. gasoline consumption at 8.92 million barrels/day (mmb/d) in 2014 and 9.03 mmb/d in 2015, which translates to actual savings of $11.4 billion last year and potential savings of $10.2 billion this year.

2. Some refineries will shut down

Phillip Brown, Robert Pirog, Adam Vann, Ian Fergusson, Michael Ratner & Jonathan Ramseur 2014. (All are with Congressional Research Service: Brown - Specialist in Energy Policy. Pirog - Specialist in Energy Economics. Vann - Legislative Attorney. Fergusson - Specialist in International Trade and Finance. Ratner - Specialist in Energy Policy. Ramseur - Specialist in Environmental Policy) 31 Dec 2014 U.S. Crude Oil Export Policy: Background and Considerations <https://www.fas.org/sgp/crs/misc/R43442.pdf>

As tight oil production has rapidly increased, technical and economic factors are motivating some stakeholders to pursue lifting crude oil export restrictions. Some oil producers would like to receive higher prices for oil produced. However, some refiners are concerned that regional crude oil acquisition price discounts may narrow if exports are expanded. Narrow price discounts may affect refinery operating margins and may result in some refineries ceasing operations.

1. Environmental damage from carbon emissions

Link: Lifting the export ban will create a hazardous increase in US oil production

Stephen M. Kretzmann 2015 (Founder and Executive Director of Oil Change International, a non-profit charitable organization) 14 Apr 2015 Testimony on “The Crude Oil Export Ban: Helpful or Hurtful” Subcommittee on Terrorism, Nonproliferation, and Trade of the House Committee on Foreign Affairs <http://docs.house.gov/meetings/FA/FA18/20150414/103314/HHRG-114-FA18-Wstate-KretzmannS-20150414.pdf>

The key reason that U.S. oil producers want an end to the export ban is to gain access to international markets, thus raising the price they receive for their crude. In recent years, a glut of U.S. light crude has caused a structural price differential between North American crude oil and international crude oil. This is primarily manifested in the spread between the crude oil benchmarks: WTI and Brent. Exporting U.S. crude oil would essentially end the glut of U.S. crude within in the North American market and raise the price of WTI, even while the entry of U.S. crude into the international market may lower the price of Brent. Raising the price producers receive for their crude facilitates greater production by raising capital available to reinvest in new production and by bringing into play oil fields that may not have been economic with lower crude oil prices. Allowing exports will also simply create a larger market for U.S. crude than would otherwise be available. The end result of all these factors is a hazardous increase in U.S. oil production.

Impact: Environmental damage from increased oil consumption will reduce the chances of future generations living prosperous and secure lives

Stephen M. Kretzmann 2015 (Founder and Executive Director of Oil Change International, a non-profit charitable organization) 14 Apr 2015 Testimony on “The Crude Oil Export Ban: Helpful or Hurtful” Subcommittee on Terrorism, Nonproliferation, and Trade of the House Committee on Foreign Affairs <http://docs.house.gov/meetings/FA/FA18/20150414/103314/HHRG-114-FA18-Wstate-KretzmannS-20150414.pdf> (brackets added)

How much additional global oil demand may be stimulated by liberalized U.S. oil exports is subject to many factors. The CGEP report suggests a range of between 0 and 1 million bpd – a wide range derived from the multiple uncertainties considered in the analysis. However, if we assume that a likely impact that is in the middle of that range, then an additional 500,000 bpd [barrels per day] of additional oil demand would lead to emissions of up to 110 million metric tons of carbon dioxide equivalent (CO2e) per year. This is equivalent to the emissions from 29 average US coal-fired power plants or over 23 million average passenger vehicles. A net increase in global greenhouse emissions is very likely to be the result of lifting the crude oil export ban. The United States and the world have agreed in multiple international forums to limit average global temperature rise to below 2 degrees Celsius. At this point, the world is dangerously close to passing the point at which that goal can be achieved and therefore condemning future generations to climatic changes that will drastically challenge their chances of living prosperous and secure lives.

1. Train accidents

Lifting the export ban increases railway transportation of oil, causing more deadly accidents and explosions

Stephen M. Kretzmann 2015 (Founder and Executive Director of Oil Change International, a non-profit charitable organization) 14 Apr 2015 Testimony on “The Crude Oil Export Ban: Helpful or Hurtful” Subcommittee on Terrorism, Nonproliferation, and Trade of the House Committee on Foreign Affairs <http://docs.house.gov/meetings/FA/FA18/20150414/103314/HHRG-114-FA18-Wstate-KretzmannS-20150414.pdf>

Lifting the crude oil export ban would raise U.S. production further and likely send more crude oil trains to terminals on the East, West, and Gulf Coasts for export. If all of the projected increase in U.S. production (500,000 bpd) were to go by rail to export terminals crude-by-rail traffic would see a 50% increase. If increased production were to reach the top end of the CGEP analysis – some 1.2 million bpd – this could more than double crude-by-rail traffic from today’s levels. Dozens of terminals on the Gulf Coast, at least four on the East Coast and at least six planned terminals on the West Coast have facilities, or will be designed with facilities, for unloading crude oil from trains and loading it onto tankers for export. This already occurs in Albany, New York, where trains are unloaded to barges that send crude oil down the Hudson River for export to Canada. This has generated concern in Albany and right through the Hudson Valley resulting in a moratorium on the expansion of crude-by-rail in Albany. American citizens are rightly concerned about current crude-by-rail activity and even more concerned about the potential for it to grow further. According to a review of federal accident records conducted by Associated Press, at least 21 oil-train accidents and 33 ethanol train accidents involving a fire, derailment, or significant amount of fuel spilled have occurred in the U.S. and Canada since 2006. This does not include the five incidents that recently occurred in February and March 2015. In July 2013, 47 people were killed in the small town of Lac Megantic, Quebec when a train carrying crude oil from North Dakota derailed and exploded in the middle of the town. Since then, at least ten major incidents have occurred in the U.S. and Canada involving derailed crude oil tank cars and serious explosions and fires. Over 25 million Americans live within the ‘blast zone’ of crude oil trains. This is an area of within 1 mile from the tracks.

1. Environmental damage from fracking

Link: Oil exports lead to more fracking

Ben Adler 2014 (journalist)13 Jan 2014 Lifting the crude-oil export ban would worsen pollution and climate change <http://grist.org/climate-energy/lifting-the-crude-oil-export-ban-would-be-bad-news-for-the-environment/> (brackets in original)

But how would repeal of the ban affect the environment, and in particular the worst environmental problem we face, climate change? In short, it would be bad. The bigger profits to be gained from exporting crude oil would incentivize companies to drill more in the U.S. That means more oil contamination of our domestic environment — see, for example, the increasingly frequent oil-hauling train explosions — and more CO2 emissions when that oil is inevitably burned. “The environmentalists’ end objective is to leave it all in the ground,” explains Public Citizen’s energy program director Tyson Slocum. “The more difficulties [oil companies] have, the less incentive there is for additional production. It has a downward pressure on production.” In this case, the crude export ban is a difficulty, and eliminating it would therefore encourage more drilling and fracking.

Impact 1: Earthquakes. Fracking increases earthquakes

Emily Jeffers 2013. (Staff Attorney, Oceans Program, Center for Biological Diversity) 14 Nov 2013 Letter to the California Coastal Commission, “Re: The Coastal Commission’s Regulatory Authority and Mandates Relating to Fracking in Oil and Gas Wells Offshore California” <http://www.biologicaldiversity.org/campaigns/california_fracking/pdfs/Center_CoastalCommissionFrackingLtr_11-14-13.pdf> (brackets added)

In California, oil and gas extraction has in the past likely induced strong earthquakes, including two over 6.0 in magnitude. Recent studies have also drawn a strong connection between the recent rise in waste water injection and increased earthquake rates. Wastewater injection has likely been triggering seismic events in Arkansas, Colorado, Ohio, Oklahoma, and Texas. In Oklahoma, the USGS [United States Geological Survey] recently acknowledged that wastewater disposal from fracking is a “contributing factor” to the six-fold increase in the number of earthquakes in that state. In addition, fracking has been found to contribute directly to seismic events, and even if the earthquakes that fracking directly generates are small, fracking could be contributing to increased stress in faults that leaves those faults more susceptible to otherwise naturally triggered earthquakes of a greater magnitude.

Impact 2: Environmental destruction. Fracking damages air, water, wildlife and health

Emily Jeffers 2013. (Staff Attorney, Oceans Program, Center for Biological Diversity) 14 Nov 2013 Letter to the California Coastal Commission, “Re: The Coastal Commission’s Regulatory Authority and Mandates Relating to Fracking in Oil and Gas Wells Offshore California” <http://www.biologicaldiversity.org/campaigns/california_fracking/pdfs/Center_CoastalCommissionFrackingLtr_11-14-13.pdf>

On land, fracking, drilling, and the resulting toxic wastewater have developed an extensive track record of spills, accidents, leaks, pollution, and property damage; offshore, those effects are heightened by the added complications of operating in a difficult environment. The damages from fracking and drilling to air, water, wildlife, and health have been severe, and often irreversible. Yet the full extent of the risks and the long-term impacts are not even yet fully understood. Hundreds of carcinogenic and toxic chemicals are known to be used in fracking, but the full extent and composition of chemicals used in fracking is undisclosed by industry. The latest fracking techniques, including the high volume, high-pressure use of the chemical fracking fluid combined with horizontal drilling, have been in use for only about a decade, yet in that time have transformed the oil and gas industry and led to drilling booms around the country by facilitating production from shale formations that could not previously be economically developed. The environmental and community destruction have been dramatic.

“Fracking has been going on for years with no problems” - Response: Modern fracking is different, and more perilous

Emily Jeffers 2013. (Staff Attorney, Oceans Program, Center for Biological Diversity) 14 Nov 2013 Letter to the California Coastal Commission, “Re: The Coastal Commission’s Regulatory Authority and Mandates Relating to Fracking in Oil and Gas Wells Offshore California” <http://www.biologicaldiversity.org/campaigns/california_fracking/pdfs/Center_CoastalCommissionFrackingLtr_11-14-13.pdf>

While industry claims that companies have been safely fracking wells in California for decades, modern fracking is new, different, and more perilous. Today, to help profitably draw oil out of shale formations, companies will drill extensive horizontal wells, and repeatedly fracture the surrounding shale by pumping a mixture of chemicals called “slick water” down the well under immense pressure. Slick water is truly hazardous, containing chemicals that could cause cancer or damage to the nervous, cardiovasculatory, and endocrine systems. Solid and fluid oil exploration wastes can generally be placed into three categories: produced water, drilling fluids and cuttings, and associated wastes. Produced water can contain harmful substances like benzene, arsenic, lead, hexavalent chromium, barium, chloride, sodium, sulfates, and boron, and it also can be radioactive.

Fracking can trigger an earthquake: UK Study

Dr Dave Healy 2012. (Senior Lecturer in Geomechanics, Department of Geology & Petroleum Geology University of Aberdeen, Scotland) “Hydraulic Fracturing or ‘Fracking’: A Short Summary of Current Knowledge and Potential Environmental Impacts, July 2012 <http://www.epa.ie/pubs/reports/research/sss/UniAberdeen_FrackingReport.pdf>

Two recent earthquakes near Blackpool in the UK have been attributed to fracking treatments applied at the nearby Preese Hall 1 well of Cuadrilla Resources (Cuadrilla). Detailed and comprehensive analyses by third parties after the earthquakes has shown that the most likely cause of the seismic activity was slip in a previously unmapped, highly permeable fault zone located near the base of the well (de Pater and Baisch, 2011; Geosphere, 2011). Diversion of much of the pumped water into this fault zone eventually led to the relief of sufficient stress to allow the fault to move, on at least two separate occasions, both events occurring shortly after large volume water injections at the well head.

“Studies show fracking is safe” - Response: Studies are influenced or blocked by industry pressure. Example: EPA tried to study it in 1987 but was blocked from obtaining the data

NEW YORK TIMES 2011. (journalist Ian Urbina) 3 Aug 2011 “A Tainted Water Well, and Concern There May Be More” <http://www.nytimes.com/2011/08/04/us/04natgas.html?pagewanted=all&_r=0>

Ms. Greathouse, the former environmental research contractor and the lead author of the 1987 E.P.A. report, said that she and her colleagues had found “dozens” of cases that she said appeared to specifically involve drinking water contamination related to fracking. But they were unable to investigate those cases further and get access to more documents because of legal settlements. All but the Parsons case were excluded from the E.P.A. study, she said, because of pressure from industry representatives who were members of an agency working group overseeing the research.