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BSEE's Proposed Blowout Preventer Rule with Chris Eaton and Lowry Yankwich—January 30, 2023

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Lowry Yankwich:

Welcome to CleanLaw. My name's Lowry Yankwich, and today I'll be speaking with Chris Eaton, a senior attorney in the Oceans Program at Earthjustice. We'll be speaking about offshore oil drilling and new proposed regulations by the Department of Interior to improve safety after the tragic Deepwater Horizon spill in 2010. I hope you enjoy the podcast.

Chris is a really interesting guy. I'm really excited to talk to him today. He has a degree in biology and environmental studies. He's worked as a field biologist studying salmon and sea turtles, and he also has a degree in aquatic and fishery sciences, not to mention a law degree. So Chris, thank you so much for being here. As a starting point, I always like to get a sense of you and sort of the organization you work for. So could you say a little bit about what Earthjustice does and what you do at Earthjustice?

Chris Eaton:

Sure. Thanks so much for having me on. So Earthjustice is a public interest nonprofit law firm, and we function as a law firm that we represent other organizations and individuals to bring litigation. We don't bring it on our own behalf. And fundamentally, Earthjustice uses the power of the law to promote healthy communities, fight climate change, fight the biodiversity crisis, and really use the law as a way to improve environmental conditions in the country.

Lowry:

And how about your own role there? I know you're in the Oceans Program. Could you say a little bit about that?

Chris:

Yeah, so I'm a senior attorney in the Oceans Program and I came here via our Rocky Mountain office before the Oceans. So I've been with Earthjustice now for a little over eight years and work with other attorneys in the Oceans Program and occasionally in other programs to bring litigation and also engage in administrative advocacy, things like filing public comments and doing other things to try to convince the government to do some good things for the environment and our oceans.

Lowry:

So today we're going to be talking about oil drilling and safety regulations around that, but just at the start, what are some of the issues at a broad level within the ambit of oceans that come up in an environmental context? I'm sure it's a pretty wide range, but can you say a little bit?



Yeah, I mean, offshore drilling has been a big one, especially in recent years. So we've got a pretty broad docket, challenging things like offshore lease sales, these safety regulations that we're going to talk about trying to protect wildlife from offshore oil and gas. The Oceans Program does a lot around fisheries and fighting for sustainable fisheries, reducing bycatch. Also, we do a lot of work on biodiversity, and we've done a lot of work protecting top predators like sharks and charismatic megafauna like whales and sea turtles. So there's a pretty broad range of things, but for at least me personally, I've been doing quite a bit on offshore oil and gas over the past few years. It's been more of a focus for us recently.

Lowry:

And we're definitely going to get into that really soon. The last thing I wanted to ask you in this sort of introduction portion is, it's really interesting reading your bio and talking to you a little bit before this, but can you say a little bit about how you got to where you are now from studying salmon in Alaska to suing oil companies on offshore drilling?

Chris:

Yeah. I kind of had always wanted to be an ecologist and go do field biology. I'm going to go to graduate school, get a PhD, go be a professor, go out in the field and do all these really cool things. And had several experiences along the way where I was doing research on sea turtles, doing research on salmon. And the implications of that research for conservation among the scientific community among the scientists was, "Oh, here's what you need to do to save salmon in the Columbia. Here's what you need to do to save sea turtles."

And kept seeing the decision makers, the managers, the policymakers, were kind of just brushing that aside and say, "You know what, that's cool, but we're going to go do something that is totally contrary to the science, and it was really frustrating." And so while I was in graduate school, I took a class called Endangered Species Management and read about litigation that Earthjustice had brought to protect gray wolves and read about how Earthjustice's lawyers basically explained to a court how the genetics of wolves meant that they were actually more at risk than Fish and Wildlife service was letting on.

And the court told Fish and Wildlife Service like, "Look, you need to go redo this." And I saw, I was like, "Wow, lawyers can force agencies to actually follow the science." And it was really hard to pull myself away from doing field work, but I saw going to into law as a way to actually get science the respect it deserves in decision-making. So that's how I ended up here.

Lowry:

So we're going to talk about offshore oil drilling, and I think a place to start is maybe the Deepwater Horizon spill the largest spill in history, I think, and has precipitated a lot of change in the ensuing years. I wanted to start on a personal level, if you remember where you were and what you thought when you first learned about the spill.



Yeah, I was in grad school at the time, still a marine biologist, and I remember seeing the spill happening and at first, you're like, "Wow, this is a terrible disaster, but I'm sure they'll get it under control in a day or so." And then just watched it went on and on and on. And this is after I had spent some time working in the gulf in Florida studying sea turtles. So had some familiarity with the environment down there, and it was just truly devastating seeing the images of wildlife covered in oil and seeing the footprint of this spill just kept growing and growing. And in a way it felt unsurprising. Oil development in the gulf is risky and you kind of look at it and you're like, "Well, that was bound to happen at some point." I've since learned some more about the detail of how it came to happen, and its kind of was inevitable once you know kind of the conditions that led up to it.

Lowry:

I want to get to that right away. The only question I have between then is can you talk a little bit more about the impacts of the spill? From what I understand, April 2010 is when the leak or explosion first happened, and so its oil spilling out and spilling out. And it wasn't until September, I think of that year that it was finally deemed closed. So a huge span of time and a huge amount of oil. But can you talk a little bit about what happened after the leak began?

Chris:

Yeah, it was really tragic. I mean, it's important to remember that 11 workers lost their lives in that tragedy. So it is not just an environmental disaster is a personal one as well. And the spill happened over the course of about 87 days. I think the estimates are about five million barrels of oil spilled covered 43,000 square miles of ocean, thousands of miles of coastline. It's really hard to quantify exactly how much environmental damage there was just because the ocean is a big place. But some of the best estimates are that it killed billions if not trillions of individual animals over 100,000 animals that are federally protected under the Endangered Species Act.

One species that I've been doing a lot of work on recently is the critically endangered Rice's whale, which was kind of only recently known to be a separate species. There are only about 50 or fewer of these whales left in the Gulf of Mexico. It's the Gulf's only year round resident baleen whale and researchers estimate that the spill killed about 17% of that population, and they're expected to need about 70 years to recover from that harm. And for a species that's fewer than 100 individuals left, that's devastating on population level. And there are still studies coming out, there's still finding to this day, what we're almost 13 years later, still finding impacts to populations years later.

Lowry:

So you mentioned as you looked into it more, you got a better sense of how it came to happen, and I know the Obama administration created this independent commission to study the spill and to give findings on what happened and what could be prevented. So can you speak a little bit to how the actual spill occurred, and you could speak both technological or government oversight, whatever makes the most sense to you.



My understanding of what happened is the Deepwater Horizon rig was drilling an exploration well, so basically trying to find out how much oil was in the area. They had dug this well, they had found oil there and they needed to put a different rig on there to extract the oil and start producing it. So first the oil under the sea surface is under this enormous pressure. So if you poke a hole in its just going to squirt right out. So you've got this pressure of oil coming up. So to prevent the oil from coming out, when they changed the rig over, they had to put a temporary plug in the well, a cement plug. And what happened was that cement plug failed and they do some tests on the cement to say, "Okay, is this plug properly installed?" And the crew misinterpreted the results and thought the plug was fine.

Also, to prevent this oil from coming out, the rig is pumping mud and fluids down to kind of keep pressure on the oil, so it doesn't come back out. So they said, "Okay, plug is fine. We're going to remove this counter pressure from these fluids." And the plug failed oil, gas shot up through the well. And oil rigs have what's called a blowout preventer. So when oil and gas come shoot it back up through the, well, it's known as a blowout of the well, and they're supposed to have this blowout preventer that can be activated to kind of last ditch emergency seal the well. So the crew tried to seal that, activate that blowout preventer. What had happened is there was so much pressure from the oil and gas that it caused. There's a drilling pipe in that blowout preventer that buckled. And so the blowout preventer couldn't actually do its job and seal because the pipe was bent, basically kind of prevented the thing from activating and oil and gas flowed onto the rig and ignited and you had the explosion.

So that's kind of the technical explanation of what happened. And so the commission afterwards found there were obviously all of these technological failures, the ways that blowout preventers are designed can't account for these things. The way that cement evaluation was going on was not proper. But what these commissions found is there was this systemic failure of government oversight, systemic failure of regulation, like a culture of complacency where industry is basically self-policing, not really paying the attention to things like equipment inspections and safety, that it really needed to prevent things like this from happening.

And so the commission recommended there needed to be much more regulatory oversight, government oversight to ensure that industry was actually complying with the highest safety standards that regulatory system needed to be overhauled. And then you also needed more technological requirements to make sure that you have backup systems redundancy and kind of you're prepared for this sort of worst case scenario with the BP disaster, several things went wrong that caused that if the cement plug had been fine, if the blowup preventer had been fine, if there were several things that worked, you needed a lot of things to go wrong for the BP disaster to happen.

And so we need to have a lot of backup mechanisms so that if something goes wrong, you've got a backup. It's a lot less likely that you're going to have a disaster like this.



Lowry:

So let's jump to the present. So in September of this last year, 2022, the Department of Interior announced this proposed rule for drilling on the outer continental shelf, and it's this well safety rule. They opened up a 60-day public comment, which I think at this point has ended. So can you talk a little bit about what is this basic rule and then where did it come from?

Chris:

Yeah, so after these commissions that investigated the BP disaster, the Bureau of Safety and Environmental Enforcement, which is an agency within the Department of the Interior, I will probably refer to it as BSEE for short. In 2016, published regulations that kind of created some of these technical improvements for the blowout preventers and other well safety equipment and created requirements for things like testing and inspection that implemented a lot of the recommendations that came out of the BP disaster. In 2019, the Trump administration issued revisions to those rules that repealed several of the requirements and honestly made drilling less safe. And so this new rulemaking is aimed at basically reinstating some of the 2016 rules that had been repealed. It doesn't revert totally to the 2016 regulations, but it is aimed at improving safety over what happened with the 2019 revisions.

Lowry:

And I just want to pause on the 2019 revisions briefly because I read, I think something that you had written about one of the problems being the granting of a lot of waivers under the 2019 rule. And so what I'm wondering is, in your opinion, where was the problem located with these 2019 rules? Is it in the rules themselves or in the lax sort of allowance of departures from the rules? If you get what I'm asking.

Chris:

So the 2019 rules themselves, basically the way that regulations generally work for offshore drilling is it creates a default. Here's what everyone needs to comply with. And then in certain circumstances, operators can ask for a waiver, say if particular circumstances or such that it would be more appropriate to do things a little differently. The problem with the 2019 regulations was it changed the default. It got rid of some of the default requirements so that operators didn't have to ask for waivers anymore because they were basically, it was a blanket waiver to all operators.

And the waiver issue is separate, and it's something that's concerning. I think it becomes more of a problem when if there is a pattern where there are so many waivers being granted that the effect is kind of a blanket waiver, everyone gets out of this requirement. And I don't know that we've seen that as a problem recently. I know it was more of a pattern kind of shortly after the 2016 rule went into effect. I don't know how much of it is that the 2019 rule just got rid of the requirements that everyone was seeking waivers for. But the problem with the 2019 is fundamentally that it reduced the default requirements.

Lowry:

So it's sort of changing the default, changing the floor that everyone has to stand on. So let's talk a little bit about the new rules. And it seems to me like there are a few kinds of categories to which they're addressed. So there's sort of technological aspects and



there's sort of regulatory or sort of transparency aspects maybe as a starting point. Could you talk to some of the technological dimensions of the rule and what it's asking of operators in this new rule?

Chris:

Yeah, I talked about the blowout preventers and the way that they function is kind of two ways. One is it inflates something that fills the wells, so things don't come out. And another way that it works is basically kind of these blades that cut across and seal and one of the 2019 changes had said, "You only need to make sure those things happen in the event of a kick." So if a surprising jolt of oil and gas that comes up, but there are other times where you may need to seal well in an emergency. And so, one of the changes in 2023 in these regulations is that it would require that these blowout preventers be able to seal at all times. So it expands the circumstances when they should be able to seal and blowout preventers kind of should be designed for this. And so it shouldn't really be much of a change, but you're kind of taking away loopholes and just making sure that these things are really going to function at all times that you need them.

Lowry:

Can I just interrupt you there really quick? What's your understanding of how big an ask that is to impose these greater requirements on blowout preventers and sort of expand the scope of when they should be able to be used?

Chris:

Yeah, my understanding is that this should not change how blowout preventers are being manufactured or being used. It is just kind of adding an additional level of making sure that when you're installing blowout preventers, your operators are making sure that they're actually going to meet all these functions and it's an additional level of a safety check just to say, "Okay, this is going to do what we need it to do. It's not necessarily changing the design of them."

Lowry:

So it's not necessarily requiring a major technological leap of operators.

Chris:

Yeah, my understanding is the 2016 regulations did require some major technological leaps, but we talk in about technology-forcing regulations that require development new technology. My understanding is that the technology for these blowout preventers was kind of already in existence in 2016, and it was more of a requiring operators to actually use the advanced technology that exists. So I think 2016 regulations did require some significant changes, but we're several years down the road from there. And so I think most operators have already implemented that.

Lowry:

And one thing I'm wondering about is the breadth of these regulations in terms of which operators they apply to, whether they apply strictly to operators going forward or to some extent existing operators. And will there be changes required of existing operators or just for future builds?



The proposed regulations are going to apply to everything that already exists, the technology and the rigs that are already operating. And I think a lot of the things that are changing are kind of more performance based and operational changes as opposed to requiring changes of equipment. Shouldn't be that hard for existing rigs to comply.

Lowry:

Okay. So maybe let's talk about the operational changes or sort of these non-technological changes. What do you see as the big proposals there?

Chris:

The 2016 regulation would have required what are known as BSEE-approved verification organizations to do the inspections, do the testing, make sure all of the equipment on these rigs is safe and operating correctly. The 2019 revisions got rid of that requirement, basically said you can use any independent third-party. And the problem with that change is now you don't have agency oversight and it allows for this kind of industry self policing that was a problem before. And the proposed revisions, they don't revert to the 2016 level of organizations, but it does impose new standards to make sure that these organizations that are doing the testing and inspections are truly qualified to be looking at the technology that they're looking at and are independent.

I think one of the questions we have that we'll see what happens in the final regulations is how is BSEE the agency going to enforce those standards? How's it going to implement those? How's it going to make sure that the inspection organizations are actually maintaining these qualifications? But I think that is a big upgrade to make sure that you've got this independent qualified set of eyes, double-checking equipment. So we're not trusting solely the drilling operators to say that, "Yes, we've complied with all of the requirements. You've got an independent set of eyes that's reporting these results to the agency."

Lowry:

So there's some amount of vetting that's going to happen under these proposed rules that isn't required under the 2019 rules.

Chris:

Exactly.

Lowry:

Are these inspections onsite inspections or are they inspecting data provided by the operators?

Chris:

It kind of varies depending on what they're doing. Some of the inspections are onsite operators are sending data and you're reviewing that data to make sure there's nothing concerning in there. Sometimes they take these blowout preventers off and send them to labs or facilities to take apart and check the components. There are a lot of different ways this is happening and a lot of different ways that these third parties are involved in double-checking the results of all those inspections and tests.



Lowry:

And I think I read one other aspect of this is there's a requirement of direct submission of failure data to BSEE that maybe wasn't required before. Can you talk about the import of that?

Chris:

Yeah. One of the changes in the 2019 revisions would have allowed submission of certain data to this independent third-party that would compile the data and then provided it to BSEE on a somewhat infrequent basis by providing the data directly to BSEE. Now, BSEE has the ability to look at this in real time, and they may see trends in, oh, this certain type of equipment keeps failing, this certain manufacturer of equipment keeps failing and they can see it in real time and then respond, which may be telling operators like, "Hey, if you have this equipment on your rig, it keeps failing. You need to do something about it." So it really allows BSEE ability to track problems closer to real time and really have a better understanding of what might need to be fixed.

Lowry:

And this is kind of another basic question, but what is your sense of how often failures are occurring on rigs? And obviously there's a huge spectrum of severity of failures. Some will be minor and not super consequential, and others would obviously be a lot more consequential. But is it something that's happening all the time or infrequently? What's your sense?

Chris:

I mean, I think it depends on, again, like you said, there are a lot of different types of failures. So individual pieces of equipment, it could be everything down to one valve, for example. There are things that are going to be failing somewhat regularly, but the idea is that they're being checked, inspected on a frequent basis and can be replaced before it becomes an issue. If you've got redundant backup systems, if one thing fails, you've got a backup. And so I think those things are, it's just kind of wear and tear kind of happens on a routine basis. But we do see kind of bigger incidents are happening still a couple of times a year, but we have not seen another BP disaster because the safety equipment is presumably doing its job in those instances. So again, it's all a matter of making sure that you've got enough backup equipment, backup technology, and the operational procedures that are preventing small problems from becoming big problems.

Lowry:

That's really helpful information and sort of context. So I mentioned that there was this 60-day comment period that's since closed. Can you talk a little bit about what happens next and to the extent what the sort of parties that were most interested in this proposed rule were and how controversial do you think it will be?

Chris:

It's a good question. The comment period is closed. The next step will be that the agency will issue a final rule. The latest estimate that they've provided is that it'll come out sometime in May or June this year, Earthjustice along with several other environmental organizations, submitted comments generally supporting the changes as improving safety. And we recommended some ways that they can improve these requirements. I have not seen the submissions from industry. I've seen some public



statements about just kind of general concerns with cost and time that these changes will require, but as we were discussing before, I don't see anything in here that is going to require large amounts of cost on industry's behalf. So my hope would be that they recognize these as reasonable common sense improvements and we avoid litigation from industry over these, but we will see.

Lowry:

Yeah, I mean, I remember from my own environmental law class talking a little bit about regulatory whiplash and administrations change, the rules change. So if you're actually a company in this industry, what do you do? And maybe the answer sometimes is make the investment. And then even when the rules get more lax, you've already made the investment. So I don't know. Do you think that's a situation at play here where these companies have sort of had to invest already, and this rule isn't necessarily going to make them do more, it's just that they've been waiting for more guidance?

Chris:

Yeah, I mean, I think that's true. I think the big changes that happened, the "costly" changes, the technology side things were in 2016 and the companies have invested the money in those upgrades and the changes here don't seem to be as significant. And so you would hope that they're minor tweaks that they've already invested kind of the main changes that have been required, and I would hope that they're okay with accepting these revisions.

Lowry:

Yeah. So in the last part of this conversation, I want to take a step back and ask a few broader questions. One of them is Biden has obviously come into his first term with some pretty ambitious climate goals. And I'm curious how you see this rule fitting into the larger administration agenda. Is it just sort of an independent sideshow or is it intimately related to the other climate goals? What's your view on that?

Chris:

I would view it kind of more as an independent issue. The way that, we talked a bit about the work that the Oceans Program does on offshore oil and gas. And the way that I view it is we have litigation and work that's aimed at stopping new leasing, reducing drilling and extraction of carbon out of the ocean floor. And then we know we're not going to stop it completely. And so if there is going to be drilling, it needs to be done at the safest level possible. And so I think that this rulemaking for the Biden administration is probably, they probably view it the same way of separate from the climate commitments, recognizing that drilling is still happening and that it needs to be done as safely as possible. I would assume that it is kind of in that bucket for them.

Lowry:

And that sort of begs the question for me of where does the offshore drilling industry fit in the scope of our sort of energy economy? Is it providing a massive amount of the oil that's used in our economy? Is it a fractional tiny portion? How does it relate to the other sources of both fossil fuels and just energy at large that we use?

Chris:

So the latest estimate that I saw is I think it's about 15% of US oil and gas comes from offshore drilling. So it's not nothing, it's a chunk. And this is really kind of a question. The



administration right now is working on a new five-year offshore leasing program to decide how much more offshore acreage it wants to lease for oil and gas development. And an important question there is how necessary is new offshore development to national energy needs? And the answer is not very. There are thousands of acres that are already leased offshore for oil and gas development. I think less than half, maybe a closer to a quarter has even been developed to date. And so there's a lot of acreage out there that can still be drilled, especially as the country is transitioning to a clean energy economy. The need for oil and gas generally is going to be declining, which means the need for offshore oil and gas is going to be declining. And especially when you already have plenty of active leases out there, there's simply not a need to be leasing more acreage for offshore oil and gas.

Lowry:

I'm curious if there's at all a problem here of essentially shifting production just to other places by imposing regulations like if you're operating in the US there are greater regulations, maybe there are some extra costs. Does that encourage you to go to other parts of the world where those costs aren't as large? Or do you think the companies still have a huge interest in being in the US waters?

Chris:

One of the issues that has come up with this five-year program and also with offshore leasing decisions generally, is what's known as a substitution analysis. If we don't drill in the gulf, where is that oil and gas going to come from? And federal agencies have for years kind of assumed, isn't this perfect substitution if we need a certain amount of oil and gas. If you don't drill it here, it's going to come from somewhere. It may be from onshore sources in the US, it may be from foreign sources. And the research shows that that's not true. It's not a one for one substitution. And courts have recently struck that assumption down, yes, these companies may want to go somewhere else if they can't drill in the gulf. There are a couple things to think about. One is what are the costs of these regulations compared to if you're drilling another country, you want to get that oil to the US transportation costs that can be expensive.

So just kind of purely economic question about whether it's worth moving your operations to go somewhere else. There's a lot of oil and gas left in the Gulf of Mexico. These companies, I don't think they're going to abandon it if the marginal cost of extracting it increases. So yeah, I think it's possible they may go drill somewhere else, but it's not inevitable. One of the other fundamental issues that I think I touched on before is from a climate perspective, if you're not extracting this oil out of the gulf, that's carbon that's staying in the ground. So it's not necessarily that the same amount of oil, the same amount of carbon's going to come out, whether you take it out of the US or some other country, if you're drilling less here, you're taking less carbon out of the ground.

Lowry:

So I think this is the last question I want to ask. You talked a little bit earlier about enforcement and so I'm wondering to the extent that our goal is that we want drilling to be safer, we want to avoid Deepwater Horizon like spills in the future.



It starts with having strong regulation that takes advantage of and requires the safest technology that can exist. And that obviously those regulations need to be enforced. So that is going to require things like money for the safety agency to do the inspections and do the enforcement that it needs. These agencies have limited resources. They can't be everywhere at the same time. And so it's not just regulations, it's also funding these agencies. It's going to require things like be more stringent before granting waivers. So basically, having strong government oversight, strong regulations, strong efforts at enforcing those regulations. But then you've got organizations like Earthjustice and our partners who are going to be there to step in. And if things are not being enforced, if the agency's not doing its job, then we'll take him to court and compel them to do that. So I think it's kind of in all of the above.

I mean, I think one thing that is really important and maybe does not get as much attention is the public's role in this. There is public shaming, if you will, or attention from media and communities showing up at meetings that really has a lot of influence on government decision makers and also industry. Nobody wants to be the next BP that everyone is blaming for destroying the gulf. And so if you've got the public that is telling these companies that they want them to be safer, they want them to transition to clean energy, they've got big public relations departments, they'll pay attention to those sort of things. So things like getting this information out in things like this podcast and other media coverage can really do a lot to make drilling operations safer, better for the environment, and hopefully someday better for climate.

Lowry:

That's a great place to close out. Thank you so much, Chris, for being on CleanLaw today. It was a real pleasure to talk to you, and thanks for sharing your perspective and knowledge and everything. So thank you so much.

Chris:

Thanks so much for having me on.

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