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United States Senate

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
WASHINGTON, DC 20510-6175

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April 25, 2012

The Honorable Lisa Jackson
Administrator
US Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: 12-07-2010 Emergency Administrative Order by Region VI

Dear Administrator Jackson:

I write to express serious concerns with the actions undertaken by the Environmental Protection Agency (EPA) Region VI surrounding the issuance of an Emergency Administrative Order pursuant to a Parker County, Texas, water well complaint. To my knowledge, such federal action to preempt the state's oil and gas regulatory body was unprecedented. Following the withdrawal of EPA's administrative order, I am concerned that the Agency's intervention was of questionable necessity in light of the evidence available and in the context of the ongoing investigation and oversight of the state's regulatory body, the Railroad Commission of Texas (RRC). Additionally I am concerned with the statements and actions of Region VI Administrator Al Armendariz leading up to and during the Agency's order and enforcement.

In its order, the EPA stated it acted after concluding "that appropriate State and local authorities have not taken sufficient action…and do not intend to take such action at this time." Yet, the RRC was actively continuing their investigation to determine the source of the natural gas, and was making arrangements for additional testing. Further, on December 8, 2010, the Region VI Administrator noted the EPA had to take action or two "houses could explode." This statement seems to contradict EPA's own knowledge of the usage of the water wells – including that Domestic Well 1 had been disconnected for 3 months prior to the order – and its own actions during the months leading up to the order, which did not appear to reflect the same level of urgency.

I am concerned that EPA's proactive interest in the federal regulation of hydraulic fracturing contributed to the agency's preemptive actions. To more fully understand both EPA's basis for

intervention and its determination of well-water contamination from specific drilling and production activities, I would appreciate a full response to the following questions.

1. When did EPA first come to the conclusion that there was "imminent and substantial risk of explosion or fire" from drinking water wells utilizing the Trinity Aquifer? How much time elapsed between the date on which EPA reached this conclusion and December 7, the date on which EPA's administrative order was issued?

2. What did the Agency learn between November 16 and 23, at which time EPA had warned consumers of "Domestic Wells 1 and 2" of "*potential* explosivity concerns," and December 7, when EPA issued an Emergency Administrative Order concluding there was "*an imminent and substantial risk* of explosion or fire" from the drinking water wells utilizing the Trinity Aquifer [emphasis added]?

3. EPA's press release on December 7, 2010, referred to "hydraulic fracturing" four times; the Agency was clearly messaging that hydraulic fracturing may have caused or contributed to the presence of natural gas in Domestic Wells 1 and 2. What information, if any, did the Agency have that indicated hydraulic fracturing had caused or contributed to the presence of natural gas in Domestic Wells 1 and 2 – as opposed to any of a number of other potential causes, natural or man-made?

4. This same December 7 press release stated, "EPA scientists have conducted isotopic fingerprint analysis and concluded the source of the drinking water well contamination to closely match that from Range Resources' natural gas production well." If shallow gas is or has been produced in this area, did EPA also take gas samples from these sources to perform compositional analysis and isotopic fingerprinting as done from the Butler Well and the Teal Well? If not, why not? If so, did EPA compare this gas to the gas sampled from Domestic Wells 1 and 2? Did the gas from these shallow sources also "closely match" that sampled from Domestic Wells 1 and 2? Did the gas from these shallow sources also appear to be thermogenic in origin? Did EPA compare similarities and differences from these various sources? Did EPA take into account the analysis of the bradenhead gas from the Butler Well conducted by Range Resources? Did EPA take into account the pressure testing of the Butler Well conducted by Range Resources?

5. In the "Findings of Fact" contained within the Emergency Administrative Order, EPA appeared to rely heavily on its finding natural gas of thermogenic origin in Domestic Well 1 as likely evidence of contamination from the Butler and Teal Wells. Is EPA aware that over geologic time scales natural gas of thermogenic origin can and does naturally migrate to shallow geological formations? Did EPA have information to conclude that this would be a highly improbable occurrence in the geology of this area? If so, when was that information obtained and what is that information?

6. Is EPA aware of information published in the Powell Barnett Shale Newsletter of December 13, 2010, or other any other source, that a water well (Texas Well Report Tracking No. 226387) drilled to a total depth of 180 feet, approximately 775 feet away

from Domestic Well 1 and 1192 feet away from Domestic Well 2, on October 15, 2005 also encountered significant amounts of natural gas, years before Range Resources drilled or completed the Butler Well and the Teal well? Is EPA aware that comments on the Driller's Report on October 15, 2005, stated, "Well has natural gas coming into well at intermitting times"? Is EPA also aware of photos taken on October 15, 2005, which showed a gas flare of 5 to 6 feet in length burning from that water well? If EPA is aware of these reports, does EPA believe this information to be generally accurate? At what point did EPA acquire or was made aware of this information?

7. In the "Findings of Fact" contained within its Emergency Administrative Order, EPA stated:

> *8. Domestic Well 1 lies approximately 120 feet in horizontal distance to the east-northeast from the track of the horizontal section of the Butler Well bore.*
> *9. Domestic Well 2 lies approximately 470 feet in horizontal distance to the southeast from the track of the horizontal section of the Butler Well bore.*

Why did EPA choose to cite the inconsequential "horizontal distance" of Domestic Wells 1 and 2 from the "track of the horizontal section" of the Butler Well bore instead of the actual distance to the Butler Well bore? Was EPA attempting to create the misleading perception that the distance between the water wells and the gas wells was much closer than it actually was? In that regard, what is the approximate distance from the bottom holes of Domestic Wells 1 and 2 to the horizontal section of the Butler Well bore? Additionally, what is the distance of the wellheads of Domestic Wells 1 and 2 to that of the wellhead of the Butler Well?

8. Discussing the potential cause of the presence of natural gas in domestic water wells in this area, the Powell Barnett Shale Newsletter of December 13, 2010, states:

> *In addition, as this area on the Brazos River, with development 'canals' for boats and docks, becomes more urbanized, more homes drill their private water wells dropping the water level in the Puluxy Sand. This reduces the hydrostatic pressure on the low pressure gas in the Strawn Sand underneath and more wells are negatively affected. Any natural gas reservoirs that have been so penetrated will undergo this pressure depletion, and, because of particular sandstone geometric configurations, wells that once delivered only water will begin to produce natural gas as well as this area has demonstrated since 2005.*

Had EPA considered the above scenario as a possible explanation of natural gas in Domestic Wells 1 and 2? If so, when? Since EPA had "determined" that Range Resources "caused or contributed" to the presence of natural gas detected in Domestic Wells 1 and 2, what information had EPA obtained that necessarily rules out the above explanation, or any other possible explanation, as to the cause of natural gas in these water wells?

9. Since EPA "determined" that Range Resources had "caused or contributed" to the presence of natural gas in Domestic Wells 1 and 2, when and to what extent had EPA conducted research to determine the likelihood for the existence of unrecorded legacy or orphaned wells in the area? If such research was conducted, how high was EPA's confidence in its determination? If no such research was conducted, please explain why.

10. Prior to the issuance of the order, what information had EPA obtained relating to the historical and natural occurrence of shallow natural gas in this area? Was EPA aware of any current or past shallow gas production in the area (i.e. within two miles)? If so, when was this gas produced and at what depths are/were this gas produced? What is the approximate distance from this current or past shallow gas production from Domestic Wells 1 and 2? When and to what extent did EPA examine past or current shallow gas production in the area?

11. Prior to taking action under Sec. 1431(a), EPA must receive information that demonstrates state and local authorities have not acted to protect public health. The Region should have a written basis that documents the contact between EPA and state and local authorities. Please provide the documentation that demonstrated that the state and local authorities (in this case the Texas Railroad Commission) had not acted to protect public health.

12. Given EPA's withdrawal of the Emergency Order, has EPA's technical staff reversed its determination that Range "caused or contributed to the contamination" of drinking water wells in Parker County? Was this withdrawal a result of new information or a more thorough review of existing data? If new information had been obtained, why hadn't this information been obtained and/or examined prior to the Agency's determination that Range Resources "caused or contributed" to the presence of natural gas in Domestic Wells 1 and 2? If new information had been obtained, what was this new information?

13. Are you aware that the Region VI Administrator Al Armendariz made the following statement at a City Council meeting in Dish, TX on May 10, 2010, just seven months before EPA issued its administrative order against Range Resources?

> *"But as I said, oil and gas is an enforcement priority, it's one of seven, so we are going to spend a fair amount of time looking at oil and gas production. And I gave, I was in a meeting once and I gave an analogy to my staff about my philosophy of enforcement, and I think it was probably a little crude and maybe not appropriate for the meeting but I'll go ahead and tell you what I said. It was kind of like how the Romans used to conquer little villages in the Mediterranean. They'd go into a little Turkish town somewhere, they'd find the first five guys they saw and they would crucify them. And then you know that town was really easy to manage for the next few years. And so you make examples out of people who are in this case not compliant with the law. Find people who are not compliant with the law, and you hit them as hard as you can and you make examples out of them,*

> *and there is a deterrent affect there. And, companies that are smart see that, they don't want to play that game, and they decide at that point that it's time to clean up. And, that won't happen unless you have somebody out there making examples of people. So you go out, you look at an industry, you find people violating the law, you go aggressively after them. And we do have some pretty effective enforcement tools. Compliance can get very high, very, very quickly. That's what these companies respond to is both their public image but also financial pressure. So you put some financial pressure on a company, you get other people in that industry to clean up very quickly. So, that's our general philosophy.*

Subsequent to EPA's December 7, 2010 administrative order against Range Resources, on January 18, 2011 EPA filed a complaint in federal district court requesting penalties against Range Resources of $16,500 per day of each violation of EPA's emergency order.

In light of EPA's unprecedented and premature actions leading up to the foreseeable withdrawal of its administrative order, wouldn't you agree that this statement, coupled with the subsequent administrative order and pursuit of fines which "can get very high, very, very quickly," at the very least, leaves the impression that Region VI was more interested in the rush to "make examples of people" in America's natural gas industry rather than the even and just application of law? In your view, do the above statement and resultant actions reflect EPA's "general philosophy" concerning enforcement?

14. Do you believe it is appropriate for the Regional Administrator to make statements in which the Agency has "determined" that due to a company's actions, "houses could explode" despite evidence known to Agency staff which would reasonably preclude such an outcome? Do you believe it is appropriate for the Regional Administrator to share information which publicizes investigatory findings and agency actions by notifying environmental activists and media outlets prior to relevant state agencies involved in the investigations?

15. Six weeks prior to the withdrawal of EPA's administrative order, Texas State District Judge, Trey Loftin, concluded that one of the residents associated with EPA's administrative order worked with an environmental activist to create a "deceptive video." A February 18th, 2012 article in the Star-Telegram reports:

> *In his order, Loftin expressed concern that Lipsky, "under the advice or direction" of Rich, attached a hose to the water well's gas vent -- not to a water line -- and then lit the gas from the hose's nozzle.*
>
> *"This demonstration was not done for scientific study but to provide local and national news media a deceptive video, calculated to alarm the public into believing the water was burning," the judge wrote. Loftin also cited evidence that Rich had sought to mislead the EPA.*

To what extent did EPA coordinate with and/or rely upon information provided by Ms.

Rich or Mr. Lipsky in the issuance of EPA's administrative order and ensuing further investigations? To what extent did Judge Loftin's findings contribute to EPA's subsequent withdrawal of its administrative order? To what extent is EPA investigating any misleading actions of and/or information provided by Ms. Rich and/or Mr. Lipsky?

16. In EPA's actions in Parker County, TX, Pavillion, WY, and Dimock, PA, the Agency made public statements implicating the process of hydraulic fracturing as the source for groundwater contamination without necessary evidence to responsibly justify those implications. EPA's recent missteps in each of these cases reveals the Agency's preconceived conclusions and an increasingly apparent political activism in an ever-intensifying pursuit to link hydraulic fracturing with environmental harms while also utilizing questionable authority to usurp state regulators and their actions. At the same time EPA has been actively attempting to link hydraulic fracturing to ground water contamination at these sites, the Agency has been conducting a much broader study on any potential impacts of hydraulic fracturing on drinking and ground water. Would you agree that these recent incidents have irreparably harmed the Agency's credibility in conducting a non-biased, non-political, comprehensive environmental study of hydraulic fracturing? Will the Agency commit to refrain from publicizing premature conclusions in future investigations or Agency actions? Will the Agency commit to not publicizing conclusions from future non peer reviewed draft repots as it did Pavillion, WY?

I would appreciate a full and prompt response by May 11, 2012. Thank you for your attention to this matter. If you have any additional questions, please contact Dimitri Karakitsos of my Environment and Public Works Staff, at 202-224-6176.

Sincerely,

James M. Inhofe
Ranking Member
Committee on Environment and
Public Works