



NATURAL RESOURCES DEFENSE COUNCIL

February 27, 2013

Bob Perciasepe
Acting Administrator
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Mail Code: 1101A
Washington, D.C. 20460

Dear Acting Administrator Perciasepe:

In 2010, the Environmental Protection Agency (EPA) issued an emergency administrative order (“Emergency Order”) under the Safe Drinking Water Act (SDWA) regarding underground drinking water source contamination in Parker County, Texas.¹ Although the EPA withdrew the Emergency Order in 2012, the Natural Resources Defense Council is alarmed by reports that underground sources of drinking water in Parker County, Texas appear to remain contaminated and may still pose imminent and substantial endangerment to the health of persons, 42 U.S.C. § 300i, even as the EPA Inspector General investigates the matter.

EPA has an obligation to enforce the Safe Drinking Water Act, and the authority and duty to step back in where there is evidence that the domestic water from an underground drinking water source may pose imminent and substantial endangerment to human health and the relevant state agency has not sufficiently addressed the potential endangerment. To do anything less would risk the confidence of communities nationwide that are faced with oil and gas production operations within residential areas and near sources of drinking water. Communities must know that EPA will take action to thoroughly investigate and protect them from harms inflicted by the oil and gas industry.

¹ Range Resources Corporation, Safe Drinking Water Act Docket No. SDWA 06-2011-1208, (EPA Region VI Dec. 7, 2010) (Emergency Administrative Order), http://www.epa.gov/region6/6xa/pdf/range_order.pdf.

Background

On December 7, 2010, EPA issued the Emergency Order² to Range Resources and Range Production (collectively “Range”) on the grounds that: 1) water samples demonstrated the presence of methane, benzene, toluene, ethane, propane, and hexane in two domestic water wells fed by an underground source of drinking water; 2) these contaminants pose a variety of risks to the health of persons and may present imminent and substantial endangerment to human health; 3) the isotopic fingerprint analysis of methane obtained on October 26, 2010 from local domestic wells and Range’s gas wells (Butler and Teal) indicated that gases from the water and the gas wells are “likely to be from the same source”³; and 4) the state agency with jurisdiction over such matters—the Texas Railroad Commission (RRC)—had not taken sufficient action to address the endangerment or had no intention to take such action at the time.⁴

EPA’s Emergency Order (paragraph 50) required Range to:

- provide replacement potable water supplies for the consumers of water from the domestic wells in question;
- install EPA-approved explosivity meters in affected dwellings;
- submit to EPA a survey that lists and identifies the location of all private water wells within 3,000 feet of the Butler wellbore track and 3,000 feet of the Teal wellbore track, as well as all of the Lake Country Acres public water supply system wells for sampling;
- conduct soil gas surveys and indoor air concentration analyses of the properties and dwellings;
- submit a plan for EPA approval identifying gas flow pathways to the Trinity Aquifer, eliminating gas flow to the aquifer if possible, and remediating impacted areas of the aquifer.⁵

RRC stepped in to the matter and held hearings on January 19 and 20, 2011.⁶ On March 22, 2011, RRC issued a Final Order on the matter, finding that Range’s wells have not caused or contributed and are not causing or contributing to contamination of any domestic water wells.⁷ EPA withdrew its Emergency Order on March 29, 2012.

² *Id.*

³ *Id.* ¶ 25.

⁴ Safe Drinking Water Act, 42 U.S.C. § 300(i)(a).

⁵ Emergency Order ¶ 50.

⁶ Range Production Company Domestic Well Water Contamination, Oil & Gas Docket No. 7B-0268629, (Railroad Comm’n of Tex. Mar. 22, 2011), <http://www.rrc.state.tx.us/meetings/ogpfd/7B-68629-commcalled-epa.pdf>.

⁷ *Id.* Fingerprinting testimony presented by Range at the RRC hearing is conclusory and inconclusive. It does not demonstrate that Range’s activities did not cause or contribute to the contamination of the Lipsky well. See Range Production Company Domestic Well Water Contamination, Oil & Gas Docket No. 7B-0268629, (Railroad Comm’n of Tex.), <http://www.rrc.state.tx.us/meetings/ogpfd/7B-68629RangePFD-03-11-11-commcalledepa.pdf>.

Addressing endangerment

The RRC ignored EPA's prescriptions for addressing the endangerment:

- 1) EPA had ordered soil gas surveys and indoor air concentration analyses of the properties and dwellings. These were not mentioned in the RRC's Final Order or its appendices.
- 2) EPA had ordered a plan identifying gas flow pathways to the Trinity Aquifer, eliminating gas flow to the aquifer if possible, and remediating impacted areas of the aquifer. The RRC Final Order and appendices do not mention any such plan.
- 3) EPA had ordered provision of replacement of potable water supplies for the domestic well consumers. There is no mention of this in the RRC Final Order and appendices. Further, a recent Associated Press (AP) article reports that one of the domestic water consumers, Mr. Steven Lipsky, pays \$1,000 per month for water service, where previously he was able to use the domestic well as his family's water source.⁸
- 4) EPA had ordered the installation of EPA-approved explosivity meters. The Final Order and Appendices make no mention of these. The AP story states that the Lipsky home has a methane detector, but does not state whether it is EPA-approved nor who paid for it.
- 5) EPA's Order had required Range to submit to EPA a survey listing and identifying the location description of all private water wells within 3,000 feet of the Butler wellbore track and 3,000 feet of the Teal wellbore track and all of the Lake Country Acres public water supply system wells for sampling. The AP reported that Range has not shared its data with EPA or RRC. RRC's Statement of the Case presents some data⁹ identifying private wells, and data about those wells, which are stated to have come from Range. However, the data do not appear to be comprehensive.

Of the five requirements EPA had established that would sufficiently address the endangerment, there is no evidence that any of them have been fully complied with. In a December 2011 e-mail, EPA Region 6 Director of Compliance Assurance and Enforcement wrote: "I do think we have a technical duty to verify that soil gas in and around some of the homes is not a human health problem. A well designed and implemented soil gas survey can address this issue. Remediation of any 'found' problems

⁸ Ramit Plushnick-Masti, EPA backed off Weatherford Water Contamination Probe After Gas Drilling Company Protested, Associated Press January 16, 2013, available at <http://www.dallasnews.com/news/state/headlines/20130116-epa-backed-off-weatherford-water-contamination-probe-after-gas-drilling-company-protested.ece>.

⁹ Range Production Company Domestic Well Water Contamination, Oil & Gas Docket No. 7B-0268629, (Railroad Comm'n of Tex. Mar. 22, 2011), <http://www.rrc.state.tx.us/meetings/ogpfd/7B-68629RangePFD-03-11-11-commcalledepa.pdf>.

is straight forward.”¹⁰ Yet there is no evidence this has happened, or that either RRC or Range acted to address the imminent and substantial endangerment to human health before or after EPA withdrew its Emergency Order.

Current concerns

On January 16, 2013, the Associated Press (AP) reported that it had obtained a confidential report demonstrating that EPA had scientific evidence against Range, but changed course after the company threatened not to cooperate with a national study on hydraulic fracturing.¹¹ The AP also reported that interviews with Range representatives confirmed this information. A copy of what appears to be the confidential report referred to in the AP article, written by an independent scientist reviewing the case, concluded that Range’s Butler well was “the most likely source of methane” in the domestic water wells, and that the carbon and hydrogen isotopic values of the Range gas wells match the values in the domestic water wells.¹² Testimony from Range’s expert, Mark McCaffrey, is reported to concede “that the gas sample the EPA collected from Lipsky well was so similar to Range’s that it was all but impossible to separate them.”¹³

We have also learned from another recent news report that RRC found that the Butler well had pressure on the bradenhead, which according to the article, “is an indication that formations behind uncemented production casing are seeping fluid into the space behind the production casing.”¹⁴ Additionally, testimony and depositions by former RRC employee Thomas Richter and his current supervisor Wayman Gore, Jr., both petroleum engineers and consultants, indicate their determination that Range’s activities were the only logical explanation for the Lipsky domestic water well contamination.¹⁵

On February 22, 2013, Energywire reported that an internal EPA e-mail stated RRC thought it should not “act until the flow pathway has been determined, but they [RRC] have no plans to figure out what the flow pathway is.”¹⁶

¹⁰ E-mail from John Blevins to Al Armendariz, December 22, 2011, 6:30 am CST, available at: http://www.eenews.net/assets/2013/02/05/document_ew_04.pdf.

¹¹ Ramit Plushnick-Masti, EPA backed off Weatherford Water contamination probe after gas drilling company protested, Associated Press, January 16, 2013, available at <http://www.dallasnews.com/news/state/headlines/20130116-epa-backed-off-weatherford-water-contamination-probe-after-gas-drilling-company-protested.ece>.

¹² Report on domestic water wells, pages 1-8. There is no cover page for the report labeled “Thyne study commissioned by EPA” and available at: <http://www.earthworksaction.org/files/pubs-others/Thyne-EPA-Range-water-contamination.PDF>.

¹³ Brantley Hargrove, How One Man’s Flaming Water Fired Up A Battle Between Texas And The EPA, Dallas Observer, Apr. 26, 2012, <http://www.dallasobserver.com/2012-04-26/news/fire-in-the-hole/full/>.

¹⁴ Mike Soraghan, EPA Officials Ignored Engineer’s Theory in Range Contamination Case, Energywire, February 20, 2013, <http://www.eenews.net/ew/2013/2/20>.

¹⁵ Richter Dep. 116:17-117:20, Nov. 9, 2011, http://www.eenews.net/assets/2013/02/20/document_ew_01.pdf and Gore Dep. 127:2-127:8, Nov. 16, 2011, http://www.eenews.net/assets/2013/02/19/document_ew_04.pdf.

¹⁶ Mike Soraghan, EPA Hit Range After Official Said Texas Leaders Are Too Cozy With Drillers, Energywire, February 22, 2013, <http://www.eenews.net/ew/2013/2/22> and E-mail from Cynthia Giles, U.S. EPA Assistant Administrator, to Al Armendariz, U.S. EPA Region 6 Administrator (Dec. 4, 2010), http://www.eenews.net/assets/2013/02/21/document_ew_01.pdf.

In summary, there remain reported conditions that may cause imminent and substantial endangerment to the health of persons in Parker County, Texas. Existing evidence from EPA records and scientific analysis from technical experts supports the hypothesis that oil and gas operations may be responsible for such reported conditions. EPA has the responsibility (notwithstanding the recently announced Inspector General investigation) to take immediate action to ensure that the domestic water in the first two identified wells and in any other wells in the area that may depend upon the same drinking water source does not pose imminent and substantial endangerment to human health. EPA should also ensure that all data collected by EPA, Range, subsequent owners or operators of the Butler and Teal wells, or other wells in the area, or RRC are available to the public to review in a transparent fashion, just as EPA has done in the investigation of drinking water contamination in Pavillion, Wyoming.

Americans across the country are watching this case and EPA's actions to protect drinking water from the risks of oil and gas production operations, including hydraulic fracturing. The fact remains that the health of families in Parker County may be at risk from their domestic drinking water wells. While EPA may have discretion to withdraw its Emergency Order against Range, EPA also has the obligation to enforce the SDWA and the authority and responsibility to step back in where there is evidence that the domestic water still poses imminent and substantial endangerment to human health. We call on EPA to re-open this case and take the next essential steps to ensure that drinking water in Parker County and throughout the country is protected from the harmful consequences of fracking.

Sincerely,

Amy Mall
Senior Policy Analyst

cc: Nancy Stoner, Acting Assistant Administrator for Water
Ron Curry, Administrator, Region 6