



THE ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

JAN 10 2014

Ms. Frances G. Beinecke
President
Natural Resources Defense Council
40 West 20th Street
New York, New York 10011

Dear Ms. Beinecke:

Thank you for your September 13, 2013, letter regarding the U.S. Environmental Protection Agency's examination of groundwater in Pavillion, WY; Dimock, PA; and Parker County, TX.

Responsible development of America's unconventional oil and natural gas resources offers important economic, energy security and environmental benefits. The EPA is working with states and other key stakeholders to help ensure that extraction of these resources does not come at the expense of public health and the environment. In particular, the EPA is moving forward on several initiatives to provide regulatory clarity with respect to existing laws and using existing authorities where appropriate to enhance public health and environmental safeguards.

For example, in the coming weeks the EPA anticipates releasing its final permitting guidance specific to oil and gas hydraulic-fracturing activities using diesel fuels under the Safe Drinking Water Act's Underground Injection Control program. The guidance will provide useful clarification in light of the Energy Policy Act of 2005, which exempted hydraulic fracturing operations from regulation under the UIC program, except when diesel fuels are used as a fracturing fluid. Many of the guidance's recommended practices for hydraulic fracturing where diesel fuels are used will be consistent with hydraulic fracturing best practices in general, including those found in state regulations and model guidelines developed by industry and stakeholders. Thus, states and tribes responsible for issuing permits and/or updating regulations for hydraulic fracturing will find the recommendations useful for protecting underground sources of drinking water and public health wherever hydraulic fracturing occurs.

The EPA is also supporting the Department of the Interior's Bureau of Land Management in its efforts to provide for implementation of best practices on federal and tribal trust lands, particularly through its hydraulic fracturing rulemaking and its development of Onshore Oil and Gas Order No. 9.

In addition, the EPA plans to issue an Advance Notice of Proposed Rulemaking under Toxic Substances Control Act sections 8(a) and 8(d) on obtaining data on chemical substances and mixtures used in hydraulic fracturing. The EPA will launch a stakeholder- and public-engagement process to seek input on the design and scope of such chemical reporting. The EPA also anticipates moving forward on revisions to existing technology-based wastewater regulations to provide additional controls on pollutant discharges associated with the unconventional oil and gas extraction industry.

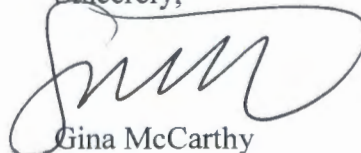
Our upcoming actions build on the EPA's existing work related to the oil and natural gas industry. In 2012 the EPA finalized the first federal air regulations for natural-gas wells that are hydraulically fractured, along with requirements for several other air emission sources in the oil-and-gas industry that were not regulated at the federal level. A key component of the final rules is expected to yield a nearly 95 percent reduction in volatile organic compounds emitted from more than 11,000 new hydraulically fractured gas wells each year. Following publication of the 2012 rules, the EPA received several petitions for administrative reconsideration. In September 2013, the EPA revised the implementation provisions for storage vessels with no change in emission control requirements and with increased compliance monitoring of these units. The agency continues to evaluate remaining issues raised by petitioners. In evaluating these issues, the agency is seeking to identify innovative approaches that could result in greater environmental benefits and transparency while remaining mindful of the importance to our country of this sector.

Furthermore, the EPA continues to move forward on our national research study on the potential impacts of hydraulic fracturing on drinking-water resources in response to a request from Congress. The agency is working in consultation with a variety of stakeholders and has provided many opportunities for the exchange of information and input on the study design and the research as it progresses. Ultimately, the results of this study are expected to inform the public and provide policymakers at all levels with high-quality scientific knowledge.

In terms of the three investigations referenced in your letter, the EPA took action when the agency became aware of information indicating potential threats to human health. The specific circumstances of the EPA's investigations in Pavillion, Dimock and Parker County are detailed in an accompanying attachment. The EPA's actions generally focused on obtaining additional data and information in an effort to better understand and assess potential threats to public health and the environment. The agency consulted with its state and tribal partners prior to taking such measures and shared data and information with homeowners, the relevant state agencies and, where applicable, tribal authorities. In each case, the EPA relied upon sound science as it sought to provide clarity to these stakeholders and ensure that public health was protected, while working closely with individual states, which have key capacity and regulatory authority relevant to unconventional oil and natural gas extraction. Beyond these instances, the EPA will continue to work with state partners and other stakeholders to help ensure that oil and gas extraction is done in a safe and responsible manner.

Again, thank you for your letter. I appreciate this opportunity to provide you with additional information on the EPA's continuing efforts to improve our scientific understanding of hydraulic fracturing and help ensure that oil and gas extraction occurs safely and responsibly. Moving forward, we are continuing to look at further opportunities for the EPA to support implementation by states and industry of hydraulic fracturing best practices.

Sincerely,

A handwritten signature in black ink, appearing to read 'Gina McCarthy', enclosed within a large, loopy, handwritten flourish.

Gina McCarthy

Attachment

Pavillion, Wyoming

In 2008 the EPA received complaints from Pavillion residents regarding smells, tastes and adverse changes in the water quality of their domestic wells. After reviewing resident concerns regarding groundwater quality, the EPA initiated a groundwater investigation at Pavillion under its Comprehensive Environmental Response, Compensation and Liability Act authorities.

To assess the situation the EPA installed two deep-monitoring wells and sampled 48 water wells, including two public water supply wells. In 2011 the EPA released a draft report outlining the data and findings for public comment, and in March 2012 the EPA announced that it would conduct additional sampling in coordination with the U.S. Geological Survey, the Northern Arapaho and Eastern Shoshone tribes and the state of Wyoming.

During the public comment period on the EPA's sampling results and draft findings, the EPA worked closely with Wyoming officials to determine the best path for further investigation. In 2013 the EPA announced that the state of Wyoming, with support from the EPA, would further investigate drinking water quality in the Pavillion area.

Wyoming's continuing investigation will seek to address water quality concerns and consider sampling data obtained through the EPA's groundwater investigation. Wyoming recently held a public meeting to update Pavillion stakeholders on the progress of the state's efforts. Draft reports on the integrity of gas wells and status of historic production pits will be released in the next several months and will be reviewed by independent experts. The state has sought EPA and stakeholder input on the selection of these experts. In addition, the state is moving forward with steps to ensure drinking water for residents in the area, including the recent completion of a water loading station at the Town of Pavillion well field. The state expects to begin installation of cisterns in the next several weeks for landowners who have signed agreements with the state.

Dimock, Pennsylvania

Using its CERCLA authorities, the EPA's goal in Dimock was to collect and provide the community with reliable data about the possible presence of contaminants in their drinking water and to determine whether further action was warranted to protect public health. The EPA's sampling was a direct result of requests from Dimock residents. The agency was clear that if the sample results showed an immediate threat to public health, it would take steps to protect residents whose health might be at risk.

The EPA initially conducted three rounds of sampling from 62 wells and provided temporary water supplies to four homes where data reviewed by the EPA indicated that there could be levels of contaminants that posed a potential health concern. The initial sampling took place over three weeks. After each round of sampling, EPA officials shared the sampling data with each resident, the state of Pennsylvania and Cabot Oil & Gas Corporation. The EPA also met in person with residents who requested meetings. For example, residents from seven of the first 11 homes sampled requested and received follow-up meetings with EPA representatives.

The EPA did find elevated levels of contaminants in Dimock well water at five homes at levels that could present a health concern. However, at the time that the agency concluded its work in Dimock, the residents had or were going to have their own treatment systems that reduce concentrations of contaminants to acceptable levels at the tap. Following the science and law, the EPA concluded that there was not an immediate threat to public health and no further action was needed. The agency

continues to encourage private well owners to maintain their treatment systems and to notify state officials if there are new concerns about drinking water quality.

Parker County, Texas

In 2010 Parker County residents complained to the agency about gas contamination in private drinking water wells, and the EPA took samples at one resident's wells which revealed methane contamination at potentially explosive levels.

The agency provided the Railroad Commission of Texas, the lead state agency charged with overseeing oil-and-gas-related activities in Texas, with copies of all data gathered at the Parker County site and shared its interpretation of the data with the RRC. The RRC stated that it had not reached the same conclusions as the EPA and indicated that it was unwilling to take action. Due to the potential impacts to the aquifer from elevated levels of methane, the agency issued an emergency order to Range Resources under the Safe Drinking Water Act.

In March 2012 the EPA withdrew its order in an effort to shift the focus of the investigation away from litigation and toward an effort focused on the science and safety of energy extraction. As part of this effort, the EPA and Range Resources reached an agreement under which Range would sample wells in Parker County for one year and share this data with the EPA. The EPA has reviewed the data from Range's sampling and shared it with the RRC.

On December 24, 2013, the EPA inspector general released a report, *Response to Congressional Inquiry Regarding the EPA's Emergency Order to the Range Resources Gas Drilling Company*, which concluded that the EPA's issuance of the emergency order was supported by law and fact and that our exercise of discretion to resolve the matter was consistent with all applicable rules and policies. The report stated that "EPA withdrew the order because an agreement with Range Resources was under way; the costs and risks of litigating this particular case were likely to be very high and the needed short-term benefits would be low, if any; and immediate human health risks were believed to have been addressed." Furthermore, the inspector general agreed with all of the EPA's responses to the report's recommendations and concluded that each of its recommendations was resolved.