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NATURAL RESOURCES DEFENSE COUNCIL

BY FAX AND OVERNIGHT MAIL

January 10, 2012

Shawn M. Garvin
Regional Administrator
United States Environmental Protection Agency, Region 3
1650 Arch Street
Philadelphia, PA 19103-2029

Re: Provision of Immediate Temporary Water to the Residents of Dimock, Pennsylvania Pursuant to EPA's CERCLA Authority to Respond to Threats to Human Health and the Environment.

Dear Regional Administrator Garvin:

We are writing to you with respect to the urgent situation confronting the residents of Dimock, Pennsylvania. As you know, local well water in Dimock was contaminated over three years ago as a result of faulty natural gas drilling practices by the Cabot Oil and Gas Corporation ("Cabot"). Following an improper determination by the state of Pennsylvania last November to release Cabot of its obligation to provide temporary water until that contamination is addressed, local residents have been without reliable access to safe, potable drinking water for more than one month.

The purpose of this letter is to urge that the U.S. Environmental Protection Agency ("EPA") provide immediate temporary water to the affected Dimock residents while it conducts its own independent testing of local well water pursuant to its authority under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA").

The long history of problems in Dimock began with the explosion of the private water well of Norma Fiorentino on January 1, 2009. Subsequent investigation by the Pennsylvania Department of Environmental Protection ("PADEP") revealed that local water supplies, including eighteen drinking water wells, had been contaminated by such problems as failures of improperly cased and cemented wells, spills of drilling mud from drilling operations, and migration of wastes from unlined trenches.[1] As a result, PADEP entered into a consent order

[1] PADEP and Cabot, Consent Order and Agreement (November 4, 2009) (hereinafter "November COA"); PADEP and Cabot, Consent Order and Settlement Agreement, (December 15, 2010) (hereinafter "December COSA").

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with Cabot on November 4, 2009, in which the driller promised to deliver temporary fresh water to affected residents until the contaminated water supplies were restored or replaced in accordance with the Pennsylvania Oil and Gas Act ("OGA").[2] Additionally, in October of 2010, then Secretary John Hanger publicly announced that PADEP would seek the "permanent solution of a new $11.8 million dollar fresh water 5.5 mile pipeline to Dimock, to be initially paid for by the State, and then costs recovered from Cabot.[3]

Despite these promises and Cabot's legal obligation to restore the contaminated water supplies, Dimock residents today remain without reliable clean water. In December 2010, less than two months after it was promised and approved, PADEP cancelled its plans to build a pipeline to affected residents. Instead, it entered into a modified consent order with Cabot by which the driller would ostensibly be relieved of its obligations under the OGA without actually cleaning up or replacing the polluted water.[4] As a result, Cabot discontinued provision of temporary water on December 1, 2011. Dimock residents have been without consistent clean water since then – relying instead on emergency water deliveries from non-profit groups and nearby municipalities and pumping and treating local pond and creek water with bleach.

The affected water of Dimock residents was and continues to be contaminated and unfit for human consumption, according to information reviewed by NRDC. Testing of the water conducted on behalf of Cabot and PADEP's own Bureau of Laboratories in 2010 and 2011 showed the presence of contaminants such as aluminum, barium, beryllium, iron, lead, manganese, toluene, tributyl phosphate, and non-naturally occurring chemicals associated with hydraulic fracturing gas drilling such as bis (2-Ethylhexyl) adipate, bis (2- Ethylhexyl) phthalate, and ethylene glycol – many in excess of state and federal safe drinking water standards.[5] Follow up testing paid for by Cabot in the Fall of 2011 confirmed contamination in excess of safe

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December COSA *available at* http://www.dep.state.pa.us/dep/DEPUTATE/MINRES/OILGAS/Final%20COA%20121510.pdf.

[2] November COA at 12-14. 58 P.S. § 601.208 requires that any well operator who affects a public or private water supply "shall restore or replace the affected supply with an alternate source of water adequate in quantity or quality for the purposes served by the supply."

[3] Open Letter from former Department Secretary John Hanger dated October 19, 2010.

[4] Under the terms of the December COSA, Cabot would be relieved of its "restore or replace" obligations under the OGA through compliance with Paragraph 6 of that order, which required, in relevant part, that Cabot establish 19 escrow funds – one for each of the affected families containing twice the assessed value of the property owned by each family in Dimock – and offer to install "whole house" mitigation systems at each of the affected residences. December COSA at 9-11. Pursuant to the terms of this agreement, on October 18, 2011 – without any finding as to whether the Dimock groundwater was safe for human consumption – PADEP sent a letter to Cabot citing compliance with its narrow terms, and releasing Cabot of its responsibility to provide temporary water. Letter from Acting Deputy Secretary of the Department's Bureau of Oil and Gas Management, Scott Perry, to Phillip Stalnaker, Cabot Vice President and Regional Manager dated October 18, 2011. Paragraph 6 does not describe how these actions satisfy the strict "restore or replace" obligation of 58 P.S. § 601.208 and its implementing regulations. Indeed, as demonstrated by testing results conducted by both Cabot and PADEP, discussed *infra* in this letter, the Dimock ground water clearly does not meet the regulatory standard for a "restored or replaced water supply" as outlined in 25 Pa. Code § 78.51 (providing, *inter alia*, that the supply must be as reliable and permanent as the previous supply, and that the water meet the standards set forth in the Pennsylvania Safe Drinking Water Act).

[5] See testing conducted by PADEP Bureau of Laboratories September–December of 2010 and testing submitted to PADEP by Cabot, July 8, 2010, both later submitted to EPA (it is assumed that EPA has copies of the referenced testing results. These results, as well as those cited in footnotes 7 and 10, can be provided upon request).

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drinking water standards[6] and found the presence of additional contaminants such as 1-Methylnaphthalene, 2-methoxyethanol (solvent and jet-fuel de-icer), 2-Methylnaphthalene, butyl benzyl phthalate, diethylene glycol (plasticizer), naphthalene (used to make plastics), triethylene glycol, and methylene blue active substances, among others.[7] Although a number of these additional contaminants do not yet have Maximum Contaminant Levels under federal and state law, many are known to be harmful if ingested.[8]

The remedial water treatment measures approved by PADEP in the December agreement – namely, the offer to install "whole house" methane mitigation systems at each of the affected residences – are insufficient to mitigate the continuing health hazards posed to residents by their toxic well water. Even disregarding the fact that the proposed treatment likely cannot be installed at many affected households, the whole house systems are ineffective at removing the multifold contaminants now found in the Dimock water. The systems were primarily designed for removal of methane and biological contaminants,[9] and limited water testing *after* treatment has demonstrated the presence of ethylene glycol (antifreeze).[10] PADEP has done no independent testing of post-treatement water, and seems wholly unconcerned as to its potability.

EPA is fully empowered to provide temporary water to the affected Dimock residents, now suffering daily, through its authority under CERCLA. CERCLA authorizes the agency to conduct a time-critical removal action in response to the release of any hazardous substance, pollutant, or contaminant that it determines to be a threat to public health, welfare, or the environment.[11] Rapid action is appropriate in Dimock according to EPA's regulatory standard for taking such action. In particular, there is in Dimock presently: actual and potential exposure to human populations from contaminants; actual contamination of drinking water supplies; and other federal and state response mechanisms are either unavailable or have been unavailing.[12] Appropriate action would and should include an administrative order for "the provision of alternative water supply – where necessary immediately to reduce exposure to contaminated household water and continuing until such time as local authorities can satisfy the need for a permanent remedy."[13]

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[6] Specifically, testing results showed exceedances of federal and state Maximum Contaminant Levels for iron, manganese, lead, and bis (2- ethylhexyl) phthalate.

[7] See testing conducted by TestAmerica, Carrie Gambler, Project Manager II, completed in September and October of 2011, submitted to EPA by Cabot.

[8] *See e.g.* U.S. Dept. of Health and Human Services, Toxicological Profile for Naphthalene, 1-Methylnaphthalene, and 2-Methylnaphthalene (August 2005); World Health Organization, Ethylene Glycol: Human Health Aspects (2002); U.S. Dept. of Health and Human Services, NTP Technical Report on Toxicity Studies of Ethylene Glycol Ethers (July 1993). *See also* Letter from Sandra Steingraber, Ph.D *et al.* to Lisa Jackson, Administrator, U.S. EPA dated January 10, 2012.

[9] SLR International Corp., Cabot Oil and Gas Corporation Water Treatment System (April 2011), included as Attachment A.

[10] See testing submitted to PADEP by Cabot, July 8, 2010, later submitted to EPA.

[11] 42 U.S.C. § 9604; 40 C.F.R. § 300.415(b)(1). Immediate action can be taken "regardless of whether the site is included on the National Priorities List."

[12] 40 C.F.R. § 300.415(b)(2)(i), (ii), (vii). Additionally, it is worth noting that given the high levels of methane in Dimock water, there is also a threat of fire or explosion. 40 C.F.R. § 300.415(b)(2)(vi). As methane is a natural gas, however, it is exempt from the definitions of "hazardous substance" and "pollutant or contaminant." 42 U.S.C. § 9601 (14), (33).

[13] 40 C.F.R. § 300.415(e)(9); 42 U.S.C. § 9601(23) (defining "remove" or "removal" to include the "provision of alternative water supplies.").

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Provision of temporary water in response to groundwater contamination from oil and gas drilling supported by the Agency's own precedent.[14] Accordingly, we urge EPA to either (1) issue an administrative order to Cabot to reinstitute deliveries of potable water to Dimock residents or (2) provide temporary water itself.

NRDC realizes that EPA currently has concerns about the reliability of the data presented to the agency by Cabot and PADEP and wishes to avoid making a premature decision about what action may be necessary in Dimock before complete review of the data submitted and/or conducting its own independent water testing. However, given the substantial and consistent evidence demonstrating that contamination of the Dimock groundwater exists, and the desperate and dire situation of residents worried day to day about whether they will be able to obtain fresh water, NRDC strongly encourages EPA to provide temporary drinking water without delay, under its CERCLA authority, while the agency continues to review the data and evaluate possible long-term actions.

Thank you in advance for what we hope will be your swift action to assist the affected residents of Dimock in securing their fundamental right to clean drinking water.

Sincerely,

Kate Sinding
Senior Attorney

Daniel Raichel
Legal Fellow

cc:
Lisa Jackson, Administrator

[14] In 1987, at the Tutu Wellfield site, the agency issued an administrative order to clean up "a plume of contaminated groundwater" at the Tutu Wellfield site in the U.S. Virgin Islands. EPA, Site Description: Tutu Wellfield, 1 (April 19, 2011). Testing of ground water there revealed many of the same "chemicals of concern" found present in the Dimock water, such as arsenic, barium, beryllium, iron, lead, manganese, toluene, and other volatile organic compounds. EPA, Remediation System Evaluation: Tutu Wellfield Superfund Site St. Thomas, U.S. Virgin Islands, 12 (September 15, 2011). As part of the clean up process, EPA mandated trucked deliveries of fresh water to the affected residents, and took over responsibility for water deliveries itself in 2005. Site Description: Tutu Wellfield at 1; Remediation System Evaluation: Tutu Wellfield at 4.

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