#### ONE HUNDRED TWELFTH CONGRESS

# Congress of the United States

# House of Representatives

COMMITTEE ON ENERGY AND COMMERCE 2125 RAYBURN HOUSE OFFICE BUILDING WASHINGTON, DC 20515-6115

> Majority (202) 225-2927 Minority (202) 225-3641

October 25, 2011

The Honorable Lisa Jackson Administrator U.S. Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, N.W. Washington, DC 20460

Dear Administrator Jackson:

The House Committee on Energy and Commerce Democrats have been investigating the practice of hydraulic fracturing and its potential impact on drinking water and the environment. In January of this year, we wrote to you to share some of our initial findings regarding the use of diesel fuel in hydraulic fracturing fluids. We reported that oil and gas service companies had injected more than 32 million gallons of diesel fuel or hydraulic fracturing fluids containing diesel fuel in 19 states between 2005 and 2009. Today we are writing to update this information based on new documents provided to the Committee.

Two companies — Frac Tech and Weatherford — have informed the Committee that they inadvertently provided inaccurate data in response to the Committee's request for information on the type and volume of products used in hydraulic fracturing between 2005 and 2009. As a result of these errors, our original analysis on the use of diesel fuel in hydraulic fracturing underestimated the true extent of use by more than 500,000 gallons.

The companies' errors, described below, demonstrate the difficulty in obtaining accurate information about the contents of hydraulic fracturing fluids and reinforce the need for mandatory and uniform national disclosure of this information to EPA.

On August 22, 2011, Frac Tech informed the Committee that it used almost 2.4 million gallons of a product that contains at least 20% diesel fuel. Frac Tech previously had told the Committee that it did not use this product between 2005 and 2009. Counsel for the company explained that a discrepancy in the company's record-keeping had caused this problem. As a result, the Committee's original letter to you understated Frac Tech's use of products containing diesel fuel.

Similarly, on February 25, 2011, Weatherford told the Committee that it had provided a Material Safety Data Sheet (MSDS) to the Committee that incorrectly listed diesel fuel as one of the product's components. Weatherford informed the Committee that the product does not contain diesel; rather, it contains a non-diesel petroleum distillate. As a result of this error, the information originally provided to the Committee by Weatherford's overstated the company's use of products containing diesel by nearly 1.9 million gallons.

We are providing you with an updated analysis regarding the use of diesel fuel in hydraulic fracturing that reflects these corrections. The new findings indicate a higher use of diesel fuel than our original analysis. Specifically, between 2005 and 2009, oil and gas service companies injected 32.7 million gallons of diesel fuel or hydraulic fracturing fluids containing diesel fuel in wells in 20 states.

### The Committee's Investigation

On February 18, 2010, Chairman Waxman and Subcommittee Chairman Markey announced that the Committee would examine the practice of hydraulic fracturing and its potential impact on water quality across the United States. The Committee sent letters to 14 oil and gas service companies engaged in hydraulic fracturing in the United States regarding the type and volume of chemicals they used in hydraulic fracturing fluids between 2005 and 2009.

These companies voluntarily provided the Committee with data on the volume of diesel fuel and other hydraulic fracturing fluids they used during the five year period. For each hydraulic fracturing fluid, the companies provided the Committee with a MSDS detailing the fluid's chemical components. If the MSDS for a particular product listed a chemical component as proprietary, we asked the company that used that product to provide us with the proprietary information.

Using this information, our staff calculated how much diesel fuel and fracturing fluids containing diesel fuel these 14 companies used between 2005 and 2009.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> The Committee sent letters to Basic Energy Services, BJ Services, Calfrac Well Services, Complete Production Services, Frac Tech Services, Halliburton, Key Energy Services, RPC, Sanjel Corporation, Schlumberger, Superior Well Services, Trican Well Service, Universal Well Services, and Weatherford. The 14 letters, sent on February 18 and May 6, 2010, are available on the Committee's website.

<sup>&</sup>lt;sup>2</sup> BJ Services, Halliburton, and Schlumberger already had provided Chairman Waxman and the Oversight Committee with data for 2005 through 2007. For BJ Services, the 2005-2007 data is limited to natural gas wells. For Schlumberger, the 2005-2007 data is limited to coalbed methane wells.

<sup>&</sup>lt;sup>3</sup> The Committee reviewed all MSDSs produced to the Committee and included the following in the category of "diesel": diesel fuel, products with components with the Chemical Abstracts Service (CAS) registry number of 68476-34-6, 68476-30-2, or 68334-30-5, and products with "diesel" named as a component but lacking a CAS number.

#### Use of Diesel Fuel in Hydraulic Fracturing

Our findings based on these new documents continue to raise serious concerns. Between 2005 and 2009, 12 of the 14 companies used 32.7 million gallons of diesel fuel or fluids containing diesel fuel. BJ Services used the most diesel fuel and fluids containing diesel, more than 11.5 million gallons, followed by Halliburton, which used 7.2 million gallons. Four other companies, RPC (4.3 million gallons), Sanjel (3.6 million gallons), Frac Tech (2.6 million gallons), and Key Energy Services (1.6 million gallons), used more than one million gallons of diesel fuel and fluids containing diesel.

These 12 companies injected these diesel-containing fluids in 20 states. Diesel-containing fluids were used most frequently in Texas, which accounted for more than half of the total volume injected, 16.7 million gallons. The companies injected at least one million gallons of diesel-containing fluids in Oklahoma (3.2 million gallons), North Dakota (3.1 million gallons), Wyoming (2.9 million gallons), Louisiana (2.9 million gallons), and Colorado (1.3 million gallons).

Diesel fuel was a significant component of the diesel-containing fluids these companies injected. The companies used 10.3 million gallons of straight diesel fuel and an additional 20 million gallons of products containing at least 30% diesel fuel.

Tables 1 and 2, which are attached to this letter, list the companies that reported using diesel-containing fluids and the states in which they injected them.

#### Conclusion

This new information indicates that the use of diesel fuel in hydraulic fracturing may be even higher than expected based on our original estimates. The companies' reporting errors also reinforce the need for mandatory and uniform national disclosure of the contents and use of hydraulic fracturing fluids.

We look forward to the completion of your hydraulic fracturing study and urge you to consider appropriate regulations, as well as permitting guidance, for hydraulic fracturing fluids that contain diesel fuels.

<sup>&</sup>lt;sup>4</sup> Calfrac Well Services and Universal Well Services did use any fracturing fluids containing diesel during this time period.

Sincerely,

Henry A. Waxman
Ranking Member
Committee on Energy
and Commerce

Edward J. Markey Ranking Member Committee on Natural Resources Diana DeGette
Ranking Member
Subcommittee on Oversight
and Investigations

cc: The Honorable Fred Upton

Chairman

The Honorable Cliff Stearns Chairman Subcommittee on Oversight and Investigations

## Attachment

Table 1. Injection of Hydraulic Fracturing Fluids Containing Diesel Fuel: By Company (2005-2009)

Company	Volume (gallons)
Basic Energy Services	204,013
BJ Services	11,555,538
Complete	4,625
Frac Tech	2,558,790
Halliburton	7,207,216
Key Energy Services	1,641,213
RPC	4,314,110
Sanjel	3,641,270
Schlumberger	443,689
Superior	833,431
Trican	92,537
Weatherford	228,388
Total	32,724,820

Table 2. Injection of Hydraulic Fracturing Fluids Containing Diesel Fuel: By State (2005-2009)

State	Volume (gallons)
AK	39,375
AL	2,464
AR	516,555
CA	26,381
СО	1,321,275
FL	377
KS	50,489
KY	212
LA	2,922,432
MI	8,007
MS	221,044

State	Volume (gallons)
MT	662,946
ND	3,138,950
NM	574,979
OK	3,208,391
PA	32,783
TX	16,703,762
UT	330,084
WV	8,754
WY	2,955,560
Total	32,724,820