

April 23, 1999

Honorable John H. Chafee
Chairman
Committee on Environment and Public Works
United States Senate
Washington, D.C. 20510-6175

Re: S. 724 to Amend the Safe Drinking Water Act

Dear Mr. Chairman:

I have just now become aware of Senate bill S. 724 (Attachment A) which is intended to overturn the decision in *Legal Envtl. Assistance Found. v. U.S. Envtl. Prot. Agency*, 118 F.3d 1467 (11th Cir. 1997) (Attachment B). The bill is sponsored by Senators Sessions and Inhofe who made statements on the floor of the Senate on March 25 in support of the bill (Attachment C) which contain misinformation and half-truths, most likely the result of misinformation and half-truths provided by oil and gas industry lobbyists. In an effort to set the record straight and ensure that all committee members have complete information, I am providing herein a response to the statements of Senators Sessions and Inhofe.

At the outset, let me remind you that the holding of the court in *Legal Envtl. Assistance Found. v. U.S. Envtl. Prot. Agency*, 118 F.3d 1467 (11th Cir. 1997), was that the subsurface injection of hydraulic fracturing fluids to enhance the production of gas from coalbed methane wells is "underground injection" and required to be regulated under the plain language of the Safe Drinking Water Act. Since 1980, more than 4,700 coalbed methane wells have been drilled in the State of Alabama alone and approximately 75% of these have been hydraulically fractured. Most of the hydraulic fracturing in Alabama takes place in the Pottsville Formation, an aquifer which, because of its low content of total dissolved solids, may be classified and used as an Underground Source of Drinking Water. In addition, the fractures created by hydraulic fracturing can produce pathways for fracturing fluids to migrate throughout the aquifer.

Constituents of Fracturing Fluids

Senator Inhofe stated on the floor that fracturing fluids consist of "water, gel and sand" Similarly, Senator Sessions stated on the floor that fracturing fluids consist of "water, carbon dioxide and sand" (Attachment C). Both gentlemen are seriously misinformed. As the United States Court of Appeals for the Eleventh Circuit found, "[t]he fluids used in hydraulic fracturing may contain guar gel, nitrogen or carbon dioxide gases, gelled oil, diesel oil, sodium hydroxide, hydrochloric acid, sulfuric acid, fumeric acid, as well as other additives." *Legal*

Envtl. Assistance Found. v. U.S. Env'tl. Prot. Agency, 118 F.3d 1467, 1471 (11th Cir. 1997) (Attachment B). Such additives may include “alkalines, surfactants, demulsifiers, defoamers, corrosion and scale inhibitors, and paraffin and asphaltine inhibitors.” *Information on Well Stimulation Processes* (Draft, U.S. EPA June 22, 1998). A more specific list of the fracturing fluids actually used in Alabama coalbed methane wells is attached (Attachment D). These fracturing fluid constituents are not innocuous. No one should have to tolerate the presence of these fluids in their drinking water.

Extraction of Fracturing Fluids

Senator Inhofe stated on the floor that after injection, the fracturing fluids “are extracted during the initial production stage of the well . . .” (Attachment C). This, however, is a half-truth. The United States Court of Appeals found that “[a] portion of the injected fluids . . . remains in the ground.” *Legal Env'tl. Assistance Found. v. U.S. Env'tl. Prot. Agency*, 118 F.3d 1467, 1471 (11th Cir. 1997) (Attachment B). “The only quantitative information contained in the record on this issue indicates a fluid loss of 20 to 30 percent.” *Id.* at n.5 (citing I.D. Palmer et al., *Comparison between Gel-Fracture and Water-Fracture Stimulations in the Black Warrior Basin*, in *Symposium* 233, 237).

Evidence of Harm

Senator Sessions, referring to the alleged water well contamination which initiated the *Legal Env'tl. Assistance Found. v. U.S. Env'tl. Prot. Agency* lawsuit, stated on the floor that “three regulatory agencies could find [no evidence] of contamination attributable to hydraulic fracturing activities or levels of any contaminate [sic] exceeding Safe Drinking Water Act standards.” (Attachment C). Senator Sessions, obviously, has not spoken with his constituents. They report contamination of their well water immediately following initiation of hydraulic fracturing activities. They also report that the regulatory agencies often sampled after the contamination event had passed and analyzed the samples for chemical constituents that could not be linked to hydraulic fracturing. They even report methane gas emanating from their well. They were forced to rely on bottled water for a long period and to eventually purchase and install a \$3,000 water filtration system. Why would anyone go to such great lengths if there was no contamination?

The Ground Water Protection Council survey of state regulatory agencies for contamination cases attributed to hydraulic fracturing referred to by Senator Sessions (Attachment C) yielded only one reported complaint (the one which initiated the *Legal Env'tl. Assistance Found. v. U.S. Env'tl. Prot. Agency* lawsuit). However, this survey was only directed to state oil and gas regulatory agencies. It did not include a survey of state or federal environmental protection agencies which the average citizen would be more likely to complain to if their water supplies had become contaminated. The EPA itself has found the Ground Water Protection Council survey to be inconclusive:

At this time, we do not believe legislation is necessary or desirable. While a preliminary survey of 25 State oil and gas agencies has been conducted, we believe that further investigation is warranted to evaluate the potential risk of

hydraulic fracturing of coalbed methane wells to underground sources of drinking water. EPA intends to work with State and local drinking water agencies, industry, environmental groups, and the Department of Energy in order to collect additional data that we hope will provide us with information to more fully assess potential threats to ground water.

Letter from J. Charles Fox, Asst. Adm'r, U.S. EPA to Sen. John H. Chafee (March ____, 1999) (Attachment E).

Merits of Lawsuit

Senator Sessions characterizes the lawsuit brought by the Legal Environmental Assistance Foundation for the protection of underground sources of drinking water as “baseless.” However, the United States Court of Appeals found sufficient merit in the suit to set aside the EPA’s denial of LEAF’s petition to withdraw Alabama’s underground injection control program for failure to regulate hydraulic fracturing and to remand the matter to EPA for further proceedings. As you know, courts are loathe to set aside agency actions except in the clearest of circumstances. In fact, the Court described EPA’s position as “spurious.” *Legal Env’tl. Assistance Found. v. U.S. Env’tl. Prot. Agency*, 118 F.3d 1467, 1475 (11th Cir. 1997).

In conclusion, we urge the Committee not to favorably report out S.794, but rather to leave the regulation of hydraulic fracturing to EPA to resolve as EPA has requested.

Sincerely,

David A. Ludder
General Counsel

cc: Members, Committee on Environment and Public Works