

PREPARATION H-F:

A journalist's checklist for fair and balanced reporting on hydraulic fracturing

What is "hydraulic fracturing"?

	Despite its unpleasant-sounding name, hydraulic fracturing is a commonly used production technology for bringing life to not only new oil and gas wells, but also tired, old energy wells.
	Nine out of 10 natural gas wells in America currently utilize the technique, resulting in more than 600 trillion cubic feet of gas being brought to market.
	Without it, estimates suggest that as much as 60 percent of the natural gas and 30 percent of the oil our nation produces each day would be left stranded.

How is it done?

	Hydraulic fracturing involves the deployment -- often more than a mile deep -- of pressurized water and sand to help create tiny fissures in solid rock.
	These fissures create conduits typically no more than a millimeter thick, allowing trapped, previously unreachable deposits of oil and natural gas to travel to the bore head.
	A full 99.5 percent of the materials used in "frac" jobs are composed of simple sand and water -- water that's often far cleaner and of a higher quality than the liquids already residing below the surface.

How far down does the process take place?

	Usually more than a mile beneath the water table, sometimes much more. Underground aquifers containing potable water typically reside from 50 to 600 feet below the surface. Hydraulic fracturing operations typically occur between 3,000 and 15,000 feet below the surface.
	Upon completion of the job, the vast majority of materials used in the fracturing operation are recovered, stored and often submitted for treatment by the operator.
	For the scant and highly diluted materials that remain, migration would need to advance upward, more than a mile, through solid rock, and via a network of horizontal -- not vertical -- fissures before even approaching the same strata as underground sources of drinking water.
	Not a single confirmed case of drinking water contamination has ever been attributed to hydraulic fracturing.

What does hydraulic fracturing make possible?

	<p>Nothing about the use of hydraulic fracturing is cheap, and rarely is it employed for the sake of convenience. Of the 600 trillion cubic feet of gas and seven billion barrels of oil that hydraulic fracturing has helped deliver to American consumers over the years, very little could have been produced without it.</p>
	<p>Coupled with advances in horizontal drilling technology, hydraulic fracturing has effectively redrawn the map as it relates to energy-producing potential in the United States. Thanks to massive, energy-bearing shale formations throughout the mid-Atlantic and upper-Midwest, new and significant contributions to our nation's energy supply are being made by communities with little or no history of commercial energy production -- in the process, generating billions in royalty and tax revenues. None of this would be possible without hydraulic fracturing.</p>
	<p>As significant, the utilization of hydraulic fracturing necessitates fewer wells being drilled in fewer areas, limiting the surface impact. Indeed, the volume of energy that previously required 10 holes to accumulate can now in many cases be captured with a single, cement-encased puncture in the ground.</p>

If EPA doesn't regulate hydraulic fracturing, who does?

	<p>Hydraulic fracturing was introduced in the United States in the 1940s and has been effectively regulated by state governments and oversight agencies since its inception.</p>
	<p>These regulators have been protecting our nation's drinking water for over 60 years, compiling an extraordinary record of safety.</p>
	<p>Consider: Hydraulic fracturing has been used to stimulate new energy from old wells on more than a million separate occasions in the last half-century. In that time, not a single case of drinking water contamination has been confirmed. How many environmental regulatory agencies in this country -- local, state or federal -- can claim a success rate better than a million-to-one?</p>

When will the government do a study on whether hydraulic fracturing is safe?

	<p>Five years ago. In June 2004, the Environmental Protection Agency released a 424-page report assessing the potential for contamination of USDWs due to hydraulic fracturing operations.</p>
	<p>The agency concluded that the technology poses "no threat" to underground drinking water. That's consistent with what Clinton administration EPA chief Carol Browner testified to in 1999, finding "no evidence that ... hydraulic fracturing ... has resulted in any contamination or endangerment of underground sources of drinking water."</p>
	<p>Other studies conducted over the years have reinforced these conclusions. Among them: Ground Water Protection Council: Inventory and Extent of Hydraulic Fracturing in Coalbed Methane Wells in the Producing States (1998); Interstate Oil and Gas Compact Commission: States' Experience with Hydraulic Fracturing (2002).</p>

Prepared by the Independent Petroleum Association of America.

For more information, please contact Nicole Daigle at (202) 857- 4701 or ndaigle@ipaa.org.