

**COGCC Stake Holders Meeting
Citizen's Perspective
August 10, 2012**

References

1. Ft. Worth League of Neighborhoods Recommendations for Drilling Near Schools.

<http://www.fwlna.org/air-quality.html>

A recommendation for setbacks of at least 1 mile with substantial supporting evidence. A 55 page document that includes independent analysis of air quality at school grounds, levels of carbon disulfide seen in the Plot 1 model near Burton Hill Elementary are almost 2 times above a threshold where *irreversible* effects can occur according to the American Industrial Hygiene Association. This is a valuable resource because it offers a rare collection of data from third party monitoring and a collaborative

2. Worker Exposure to Silica during Hydraulic Fracturing

http://www.osha.gov/dts/hazardalerts/hydraulic_frac_hazard_alert.html

Silica can cause irreversible damage to lungs dating back to turn of the century miners. In cooperation with oil and gas industry partners, NIOSH collected 116 full shift air samples at 11 hydraulic fracturing sites in five states (Arkansas, Colorado, North Dakota, Pennsylvania and Texas) to determine the levels of worker exposure to silica at various jobs at the worksites. Many air samples showed silica levels for workers in and around the dust generation points above defined occupational exposure limits.

Of the 116 samples collected:

- 47% showed silica exposures greater than the calculated OSHA PEL.
- 79% showed silica exposures greater than the NIOSH REL of 0.05 milligrams per cubic meter (mg/m³).
- 9% of all samples showed silica exposures 10 or more times the PEL, with one sample more than 25 times the PEL.
- 31% of all samples showed silica exposures 10 or more times the REL, with one sample more than 100 times the REL.

3. The Battlement Mesa Health Impact Assessment (HIA) is a document that provides objective information and evidence-based recommendations to increase the potential health benefits of natural gas drilling in the Battlement Mesa PUD, while minimizing potential health risks. On March 1, 2011, the second draft of the HIA became available for stakeholders in the community to review. We invited community stakeholders, including

stakeholders in government, citizen groups, academia and the private sector, to submit questions, criticisms and comments that they may have about the HIA.

<http://www.garfield-county.com/environmental-health/battlement-mesa-health-impact-assessment-draft2.aspx>

4. "*Golden Rules for the Golden Age of Gas*" (World Energy Outlook, 2012, International Energy Agency) From the International Energy Association Executive Director Maria van der Hoeven. This organization coordinates a collective response to major disruptions in oil supply through the release of emergency oil stocks to the markets. The IEA is at the heart of global dialogue on energy, providing authoritative and unbiased research, statistics, analysis and recommendations to member nations, including ours. She discusses the legitimate concerns about the environmental, social impacts, water, land use, and disruption to local communities as well as water contamination, air pollution and greenhouse gas emission. She goes on to state that if the social and environmental concerns are not addressed properly there is the very real possibility that public opposition to unconventional drilling will halt this energy revolution in its tracks. Furthermore appropriate policies must be put in place to reassure the public.

http://www.worldenergyoutlook.org/media/weowebiste/2012/goldenrules/WE02012_GoldenRulesReport.pdf