

Summary of Public Comments on the SEAB Shale Gas Subcommittee 90-day Report

August 17, 2011

Summary

One hundred sixty-three comments, including 16 detailed analyses, were received between the report's release on August 11, 2011 and August 17, 2011. These comments include complaints about the limited time for reviewing the report and objections to the Subcommittee makeup. Numerous respondents oppose hydraulic fracturing, recommend additional regulation of natural gas operations, and oppose development of non-renewable energy sources.

Sixteen detailed analyses of the report, prepared by organizations and individuals, contain some common recommendations, including:

- The Subcommittee membership should be more representative of shale gas stakeholders.
- The Subcommittee should recommend use of existing data systems rather than development of new systems for public access to operational data.
- The Subcommittee should rely more on existing regulatory systems rather than proposing new regulations.
- The Subcommittee should consider the impacts of current regulations and recommend that Congress revoke industry exemptions to environmental laws.
- The Subcommittee recommendations for reduced use of diesel engines should be reconsidered.
- The report should use precise statements in place of vague words and expansive claims of the benefits of shale gas development.

Overview of Comments Received

A total of 163 comments were received. Many respondents made several points:

- Sixty-six respondents complained that the comment period was too short. Some of these asked for not only a longer comment period, but additional public meetings on the report.
- Thirty-eight respondents objected to what they perceived as a strong industry bias in the Subcommittee and its report.
- Many comments did not address specific elements or recommendations of the report, but made general recommendations for:
 - Greater regulation of hydraulic fracturing (20 comments).
 - Halting all natural gas drilling/fracturing (19 comments).
 - Supporting renewable energy and/or water quality over natural gas production (30 comments).
 - Eliminating non-disclosure clauses in damage settlements with natural gas companies (6 comments).

- About 20 comments cited media reports or personal experiences as evidence of the dangers of hydraulic fracturing.

Summary of Detailed Analyses

Detailed analyses of the report, with recommendations for changes, were provided by 16 individuals and organizations. These are summarized below, in alphabetical order:

- **American Petroleum Institute (API), Washington, DC:** The organization commends the Subcommittee for its report and recommends:
 - That the Subcommittee should emphasize the valuable role of state regulators, who know local conditions, and should conduct: 1) a gap analysis to determine which of its recommendations are already covered, and 2) a cost-benefit analysis to avoid disruptive rules.
 - A new portal for operational data should be developed only after an analysis of the use of existing sites, including the relatively new *FracFocus* site.
 - That the report reference several API standards: Standard 65, part 2 on zonal isolation and Recommended Practice 51R, which accomplish the Subcommittee's recommendations for protection of water quality.
 - That the report propose that microseismic surveys be used to assure protection of ground water; fractures cannot be required to stay within the producing formation.
- **Anadarko Petroleum Corporation, Houston, TX:** The company agrees with many of the report's recommendations, but argues that existing regulations adequately address air emissions, water quality, and combined impacts from multiple drilling, production, and delivery actions. The company observes that *FracFocus* may address many of the report's recommendations and notes that there are many hurdles to reducing the use of diesel engines.
- **Damascus Citizens, Milanville, PA:** The organization provides its March 2010 analysis, which disputes claims of economic benefits for the Marcellus Shale play in New York State. The organization notes that claimed benefits do not properly account for the costs of environmental degradation, damage and general wear and tear to infrastructure, health effects, and pollution's impact on tourism, hunting and fishing, and property values.
- **Devon Energy, Oklahoma City, OK:** The company commends the report as valuable to improved public understanding of shale gas production and notes ongoing industry efforts to improve the environmental performance of shale gas operations. The company believes that the Environmental Protection Agency study of methane emissions from natural gas operations is flawed and overestimates emissions. The company also believes that recommendations for the protection of water quality may not be feasible or beneficial.
- **Cummins Inc., Columbus, IN:** The company asks the Subcommittee to change its recommendation to replace diesel fuel with natural gas or electric for powered field equipment. Cummins objects to the notion that diesel fueled equipment, by default, produces more harmful air emissions than natural gas fueled equipment. The company notes that new clean diesel equipment or older equipment with appropriate

controls can achieve similar low emissions levels as natural gas or electric powered field equipment counterparts.

- **Environmental Working Group, Washington, DC:** The organization expresses its concern that the Subcommittee is dominated by members with current ties to the petroleum industry. The organization provides copies of letters to Secretary Chu, signed by numerous organizations, scientists and elected officials, asking that the Subcommittee be balanced by the inclusion of representatives of affected communities and independent experts.

The organization argues that the Subcommittee, although prohibited from making regulatory decisions, does have an obligation to consider the exemptions from Federal environmental law that natural gas drilling receives. The group supports increased state and Federal regulation and an overhaul of the regulatory exemptions.

- **Gloria F., Pittsburgh, PA:** The respondent states her disappointment in the Subcommittee report and requests that the Subcommittee consider the benefits of a moratorium on drilling until it is shown to be safe. She also recommends:
 - Increased fines and penalties for regulatory non-compliance.
 - Consideration of the 1987 EPA report that confirmed water contamination from hydraulic fracturing.
 - Addition of representatives of affected communities on the Subcommittee and disclosure of industry ties of all subcommittee members.
 - Compilation of shale gas operations-related road accidents as a basis for decision making.
 - Establishment of an industry-paid fund to pay for damage resulting from industry operations.
 - The report should avoid vague, judgmental descriptions such as “not widely accepted”.
- **Independent Petroleum Association of America, Washington, DC:** The organization makes recommendations and provides detailed comments refuting the material submitted to the Subcommittee by the organization EARTHWORKS and the Oil and Gas Accountability Project. The recommendations are:
 - The report should consider existing programs, systems, and efforts – including possible modifications of efforts – before new programs are created. For example, *FracFocus* and the Risk Based Data Management System for public data access, and STRONGER and API guidance for best practices.
 - The report should consider, based on cost-benefit analysis, the use of air quality data collection by an industry subset to develop emissions factors for broader application, rather than widespread air quality data collection.
 - The report should recommend that Federally funded R&D should be broader than currently-favored environmental studies.
- **Marcellus Protest, Pittsburgh, PA:** The organization rejects the report because of the Subcommittee members’ ties to industry and the lack of recommendations for actions that immediately impact shale gas operations. The Group calls on the Secretary of Energy to reconstitute the Subcommittee and the President to halt all shale gas operations until the development of rigorous regulation. The Group argues that the Subcommittee recommendations must include consideration of regulatory processes, resources and effectiveness.

- **National Audubon Society, Newton Square, PA:** the organization supports the report's recommendations to consider thresholds with respect to site usage, water withdrawals, avoidance of sensitive areas, and science-based planning. The organization also supports the Subcommittee's policy recommendations that Federal, regional, state, and local jurisdictions need to place greater effort on examining cumulative impacts in a more holistic manner
- **Oklahoma Independent Petroleum Association, Oklahoma City, OK:** The organization appreciates the report's statement of the economic, environmental, and national security benefits that shale gas resources can provide. The organization is concerned that the report did not consider the cost and other impacts of the report recommendations on small operators that operate marginally productive wells. The organization recommends that the report include a national educational/outreach component to better educate the public on shale gas operations to prevent unnecessary fear and anxiety.
- **Bill P., Brooktondale, NY:** The respondent questions various calculations used in the report:
 - The subcommittee takes as a given that shale gas will and needs to be developed, despite the risk of "serious environmental impacts." However, non-carbon based energy sources and conservation have the potential to grow to have as large an impact over the next 25 years as shale gas, which is projected to grow to 12% of U.S. energy.
 - An analysis by Headwaters Economics shows that the economic benefit figures used by the Subcommittee are too optimistic.
 - The report's claim of reduced oil imports because of shale gas development is contradicted by Energy Information Administration projections.
 - Current low natural gas prices may be primarily due to the general economic downturn.
 - Statements about greenhouse gas emissions are based on a National Energy Technology Lab analysis that is not specifically applicable to shale gas operations.
- **Sandra P., Brooktondale, NY:** The respondent questions elements of the report and makes recommendations:
 - The report lacks a risk assessment, although the Subcommittee notes that is part of its charge and the report notes the negative impacts of shale gas development.
 - The report should use quantitative words in place of vague terms, such as "remote" chance of fracturing fluids reaching drinking water, and quantify the cases of aquifer contamination associated with shale gas development.
 - Articles published by the Society of Petroleum Engineers contradict the report's assertion that properly cemented wells do not allow leakage.
 - The report ignores the problems of abandoned wells.
 - The report should provide documentation for statements that current industry practices have improved environmental performance.
 - Dr. Howarth's paper should not be disparaged without reference to equivalently reviewed material.

- **Public Citizens, Washington, DC:** The organization recommends:
 - That the Subcommittee recommends Congress repeal the petroleum industry's exemptions to environmental laws.
 - That the report document and quantify its statement that risks to drinking water are "remote."
 - That the report should recommend that emissions data collection be mandatory.
 - That the report should recommend full disclosure of hydraulic fracturing fluid composition, without exemptions for "proprietary" components.
 - That the report should incorporate oil production in shale plays.
- **Jim R., Grindstone, PA:** The respondent recommends that the report:
 - Propose strong enforcement of best practices.
 - Propose more extensive emissions and water composition reporting.
 - Include closed-loop fluid handling systems in its list of best practices.
 - Include a more extensive analysis of the impacts of Naturally Occurring Radioactive Material (NORM) in the Marcellus shale.
- **Cynthia W., Greensburg, PA:** The respondent recommends:
 - That the report should define specific and prompt timelines for mitigation actions based on the report's recognition of current environmental impacts, and should base proposed actions on science not cost effectiveness.
 - That unlined waste impoundments should not be allowed.
 - That claims for low-carbon benefits, reduced dependence on foreign oil, and increased jobs should be reviewed for accuracy.
 - That unsubstantiated comments on Dr. Howarth's paper be removed.
 - That industry, rather than the Federal government should be responsible for research and development.