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EPA ADMINISTRATOR GINA MCCARTHY  
DOCKET ID – EPA-HQ-OAR-2010-0505  
ENVIRONMENTAL PROTECTION AGENCY  
1200 PENNSYLVANIA AVENUE NW  
WASHINGTON D.C. 20460

Dear Administrator McCarthy,

The Kentucky Oil & Gas Association, Inc. (“KOGA”) was formed in 1931 to represent the interests of Kentucky’s crude oil and natural gas industry, and more particularly, the independent crude oil and natural gas operators. KOGA is comprised of 220 companies which consist of over 600 member representatives that are directly related to the crude oil and natural gas industry in the state.

Kentucky’s oil and gas industry contributes \$1.1 billion to the state’s economy. In 2013, the industry supported over three thousand two hundred (3,200) jobs in direct and downstream industry sectors. Additionally, Kentucky’s oil and gas industry contributed over \$40 million in tax revenues to state and local governments.

KOGA welcomes the EPA’s “Reconsideration of Additional Provisions of New Source Performance Standards.” We support the proposed definitions and standards for the initial flowback and separation flowback stages. This recognition of the realities in the field is a positive step forward.

KOGA’s greatest concern is EPA’s definition of a “low pressure” gas well and the current regulatory requirements imposed on those gas wells. On behalf of Kentucky’s industry, KOGA has recommended that the EPA define a “low pressure well” as “a well with a reservoir pressure less than the hydrostatic pressure of a column of fluid to the depth of the reservoir.” After close consultation with the Independent Producers Association of America (IPAA), KOGA can also endorse IPAA’s “low pressure well” definition as:

“(a) well where the field pressure is less than 0.433 times the vertical depth of the deepest target reservoir.”

This definition was based on the weight of fresh water (8.33 lbs/gal) which is stacked on top of itself, and is known as hydrostatic pressure. Converting the density of fresh water to a pressure gradient results in 8.33 lb/gal being equal to 0.433 psi/ft. Therefore, the pressure in the well bore of fresh water is 0.433 psi/ft times the vertical well depth.

Typical gas wells in Kentucky are produced from low pressure reservoirs with low permeability. In order to make them economically productive, they are stimulated with treatments that contain very little fluid. In fact all Devonian Shale wells - the largest producing reservoir in eastern Kentucky - are currently treated using straight nitrogen. Most nitrogen flowbacks require a minimum of three days before there is a sufficient volume of natural gas to route and flare with a combustion device. Fluid treatments or, even “foamed” fluid, are almost certain to damage the formation’s permeability, negating the opportunity for Kentucky’s producers to continue developing that region’s significant resources.

The current EPA definition of a “low pressure well” is based upon the physical characteristics of a reservoir, which is then compared to the poorly defined “flow line pressure at the sales meter”. Typical gathering systems in eastern Kentucky are low pressure - typically below 100 psi with the overwhelming majority below 50 psi. This makes qualifying as a “low pressure well” under the current definition almost impossible in Kentucky.

If a Devonian Shale well cannot be qualified as “low pressure” after 1/1/15, Kentucky operators will be denied the option of stimulating gas wells with an “inert” gas such as nitrogen. Without the “low pressure” qualification, the requirement of a “Green Completion” eliminates the ability to flow the wells back to the atmosphere to remove the nitrogen used in the stimulation. Stimulating these wells with fluid does too much damage to the reservoir. The technological challenges of separating nitrogen from methane during the flowback are overwhelming, rendering the option unworkable due to the immense costs associated with the proposed requirement. KOGA expects drilling in Kentucky’s Appalachian region to cease unless the EPA adopts the proposed alternative “low pressure well” definition.

Moving forward with the EPA’s current definition of a “low pressure” well will eliminate a very large portion of Kentucky’s natural gas resources from being developed. (Ninety eight percent of Kentucky’s natural gas is produced in eastern Kentucky). Retaining the current “low pressure well” definition will impose significant economic hardships in an area of the United States that is desperate for jobs and investment. This Appalachian area of Kentucky is under enormous distress with the loss of six thousand (6,000) coal jobs since 2012. Eastern Kentucky cannot afford to lose its oil and gas jobs due to unnecessary regulatory requirements. This is especially true given that the industry has provided a workable and supportable alternative definition for a “low pressure” well.

To further support Kentucky's industry, KOGA strongly endorses IPAA's recommendation to USEPA that no emission control be required when the following scenario exists:

"A well where the reservoir pressure is less than 0.4645 times the vertical depth of the deepest target reservoir."

KOGA joined with the Independent Producers Association of America (IPAA) and six other state associations to provide scientific evidence supporting our recommendations. KOGA strongly supports the comments filed by IPAA. The evidence provided in IPAA's comments provides the EPA with an opportunity to adopt a "straightforward" definition for low pressure wells and recognize the realities of the industry in the Appalachian basin.

Again, KOGA welcomes the EPA's effort in this area. By adopting KOGA's and IPAA's recommendations, the Agency will take another important step forward in having these rules more closely reflect the realities in the field.

Please feel free to contact KOGA for any further input or discussion on these issues.

Respectfully,

A handwritten signature in blue ink, appearing to read "Andrew V. McNeill".

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