Environmental and Land Use Regulation in Nonrenewable Resource Industries

Shelby Gerking and William E. Morgan

The purpose of this note is to call attention to and to take responsibility for errors in our previously published article in *Land Economics* (Kunce, Gerking, and Morgan 2004).

The problems affect Section 2 of our *Land Economics* article, which provides background discussion. In that section, based on results presented in Kunce, Gerking, and Morgan (2002), we state that oil and gas drilling costs are significantly higher on federal property than on private property. We now realize that this finding cannot be substantiated by our previous work. This weakens the motivation for our paper.

There are two problems with our finding of drilling cost differences on federal vs. private property. First, the drilling cost data we used are predicted values from a regression model. The model does not distinguish ownership of different parcels of land, so predicted drilling cost values for similar wells will be the same on both federal and private property. Second, in the process of handling the data received from IHS, some were systematically altered by increasing drilling cost figures for 33 out of 615 wells on federal property and reducing drilling cost figures for 77 out of 789 wells on

private property. In any case, systematic changes in the data are largely responsible for our finding that drilling costs on federal property are significantly greater than drilling costs on private property.

Further research must show what can and cannot be said on whether environmental and land use regulations lead to drilling cost differences on federal vs. private property. Nonetheless, taking the initial estimates of drilling costs on the two types of land as given, the simulation results reported in the remainder of our *Land Economics* paper are error-free to the best of our knowledge. It is the reasoning presented for undertaking the paper that is flawed.

References

- Kunce, M., S. Gerking, and W. Morgan. 2002. "Effects of Environmental and Land Use Regulation in the Oil and Gas Industry Using the Wyoming Checkerboard as an Experimental Design." *American Economic Review* 92 (5): 1588–93.
- . 2004. "Environmental and Land Use Regulation in Nonrenewable Resource Industries: Implications from the Wyoming Checkerboard." *Land Economics* 80 (1): 75–93.