

ABSTRACT

Towards Understanding Methane Emissions from Abandoned Wells

Clint E Burklin

Eastern Research Group, Inc., 1600 Perimeter Park Drive, Suite 200, Morrisville, NC 27560, USA

Eben D. Thoma

U.S. EPA, Office of Research and Development, National Risk Management Research Laboratory, 109 TW Alexander Drive, E343-02, RTP, NC 27711, USA

Reconciliation of large-scale top-down methane measurements and bottom-up inventories requires complete accounting of source types. Methane emissions from abandoned oil and gas wells is an area of uncertainty. This presentation reviews progress to characterize the potential emission impacts of abandoned wells for the U.S. Available methane emission rate data for abandoned wells is reviewed and some of the ongoing research to better characterize emissions is discussed. Efforts to compile a database of well drilling activities since the 1870's for each state and each state's establishment of well plugging standards for abandoned wells are described. Major sources of uncertainty are presented. Estimated emissions from this source are put in to context by comparing to other sources of methane emissions from oil and gas production activities.