Groundbreaking methane emissions report issued for Damascus, PA

DAMASCUS, PA — In a groundbreaking study a baseline data set for methane levels in Damascus Township, Wayne County, PA, has been collected. The data set was generated using innovative recent technology by Gas Safety, Inc. (GSI), in a project commissioned by Damascus Citizens for Sustainability (DCS). Measuring ground-level methane, a baseline of methane levels was established in the Township.

“The success of this project, the first-ever of its kind”, said Barbara Arrindell, Director of DCS, “means that communities not only in the Delaware River Basin, but around the nation and around the world will now be able to establish causality and accountability for increases in methane levels attributable to shale gas drilling, giving them a powerful new tool to protect their communities from the consequences of drilling”

“The availability of a scientifically rigorous and economically affordable way to measure ambient methane is particularly important,” explained Jeff Zimmerman, DCS attorney, “because hitherto, gas drilling companies have avoided legal liability for any methane contamination they may have caused by claiming that the gas had already been present before their activities started. Community groups, despite what seems to them to be obvious causality, have been unable to overcome this legal hurdle and state governments, who have the regulatory responsibility for addressing such claims, have shown little willingness to perform or even fund the baseline studies that would provide the factual evidence of pollution needed in such cases, leaving communities and citizen groups, such as DCS, to fend for themselves.”

Until now, communities that wanted to protect themselves faced a difficult and expensive technical burden to take the necessary baseline measurements. But recent developments in analytical technology (What is CRDS instruments; Piccaro.com) have been utilized by GSI to make it possible and economical to accurately measure very low levels of methane in the field continuously, with methane measurements logged every one to five seconds in parallel with a GPS unit that tags each methane measurement with location data. The result is a remarkable graphic rendering, with data plotted on Google Earth maps of the area.

“As has continually happened in the five years since gas fracking became an issue”, said Joe Levine, DCS co-founder, “concerned citizens and communities have had to step in to do the job government should have done. Once again we have done so. We urge any community concerned about the health effects and pollution consequences of methane release from gas fracking to utilize this method to give it the necessary information. By doing so, they can help protect their property values and the health of their families and communities and place the financial liability for such damage squarely where it belongs, on the drillers.”

“We are also pleased to announce,” Arrindell said, “that the the results for Damascus indicate relatively low and reasonably consistent methane concentrations throughout the township. They indicate the pristine environment that is at stake if gas fracking takes place and offer additional evidence as to why we feel so strongly that hydraulic fracturing should be banned in the Delaware River Basin and elsewhere.”

Experience with shale gas fracking in Pennsylvania, and in other places, has made very clear the kinds of methane events that could threaten Damascus township and anywhere this type of drilling is done. There
have been a number of high profile contamination or gas (methane) migration events that the gas drilling companies involved and the state regulatory, e.g., Pennsylvania Department of Environmental Protection (PADEP), have tried to dismiss as rare and manageable occurrences, though actual solutions to these events are never seen (e.g., Leroy and Susquehanna gas migration events). However, and this is what makes the GSI breakthrough so important, the vast majority of contamination events seem to have been much less dramatic, though widespread in the impacted areas. These events may be noticed by residents as changes in well water quality or indoor air quality, and become the subject of lawsuits with settlements that typically take years to reach resolution and usually include acceptance of non-disclosure agreements by the plaintiffs. Hopefully, the presence of reliable baseline data will make the process of establishing liability and damage far easier for communities, giving them more bargaining power with the shale gas industry and state regulatory agencies. Also by avoiding the onerous non-disclosure agreements citizens are often forced to sign as a condition of getting any financial relief, systematic accountability to the public for industry practices will become possible.

Damascus Township, Wayne County, Pennsylvania lies within the Marcellus shale gas region (MAP)*. Most of the Township has been leased for shale gas development**, but a moratorium on gas drilling in the Delaware River Basin has delayed drilling in the area***. As noted above, in other parts of the Marcellus Shale region (and other shale areas) that have already been drilled there are numerous reports of methane contamination of domestic and farm water wells, ground waters, indoor air, also human and animal health impacts and gas well “blow outs” with dramatic even above ground, “methane migration” events.

A detailed description of the results for Damascus Township and the technical process of the new GSI program are in the Report. How interested members of the public can utilize the report results is posted on DCS’ website on the same page DamascusCitizensForSustainability.org/2012/10/damascus-baseline/

Damascus Citizens for Sustainability (DCS) is a collaborative effort to preserve and protect clean air, land and water as a civil and basic human right in the face of the threat posed by the shale gas extraction industry. In its fifth year, DCS has focused its advocacy and legal efforts to protect the Delaware River Watershed that provides drinking water for some 20 million people but increasingly has extended its efforts across the Marcellus region and beyond. We are interested in documenting the environmental and economic costs of gas fracking and ensuring the drilling industry is held accountable for their consequences to affected landowners and residents.