Statements from Mary Jane Uttech, Deputy Public Health Director, Cortland County at the June 10th, 2010, showing of the movie "Gasland" in Homer, NY

I am going to briefly address some of the public health concerns related to gas drilling.

Last year, thousands of organizations responded to the DEC's invitation to comment of their Draft Supplemental Generic Impact Statement, referred to as the dSGEIS. The EPA criticized the dSGEIS for a lack of emphasis on potential health impacts of drilling and for not including the Department of Health as a co-leader in the development of the document.

The Cortland County Health Dept submitted concerns about the dSGEIS focused mainly on drinking water issues. Cortland County is unique in that nearly 100% of our residents obtain their drinking water from the ground. Most of our population gets its water through a sole source aquifer. Being a sole source aquifer means that there is no other economically feasible source of water for that given area. Our aquifer is extremely fragile—fragile enough that we are one of just a few counties in New York where the DEC has delegated the task of Petroleum Bulk Storage regulation to the local health department to ensure adequate oversight.

With aquifer protection in mind, the dSGEIS indicates no minimum or required inspections or oversight of the gas drilling process. It only requires monitoring of drinking water quality from residential wells within a 1,000 or 2,000 foot radius of the well. However, monitoring needs to be based on local hydrogeology, not on arbitrary distances. It is not clear who will pay for the monitoring or that the results will be given to local health authorities. Additionally, the time frame for monitoring is only one year from completion of drilling activities, whereas the risk of contamination could exist for decades.

The dSGEIS requires that the local health departments respond to water quality complaints from drinking water wells. Although we agree that we are the appropriate agency to do this, this creates another unfunded mandate. Public water supplies are only required to test every 3 years for the kind of chemical contamination that drilling can cause, unless the Health Department requires additional testing for specific chemicals of local concern.

Individuals with private wells are in a vulnerable situation because their only recourse for water testing is to pay privately. Our local testing company, MicroBac, has developed a list of drilling-related chemicals that they suggest be tested. The cost is \$775. Many contaminants can exist at dangerous levels without being detected by appearance or smell alone.

Cortland County had an experience with private well contamination back in the 1970s when a DEC-permitted gas well contaminated water wells over 3,000 feet away from the site (well beyond the distance require by the dSGEIS for testing). As a result, a water supply system was created to supply 17 homes affected by the spill. To this day, the Harford Water District remains in place, private wells east of the creek are prohibited, and the residents have to pay all maintenance expenses, recently having to pay for a complete replacement of most of their system.

The New York State Rural Water Association's position statement about the dSGEIS concludes that it "provides inadequate protection for New York's vital drinking water resources."

In addition to water concerns are concerns about air pollution. Air pollution is released at all stages of gas operations. Individually, gas wells don't emit enough pollution to trigger much state regulation. But, the EPA agrees that, considered in the aggregate, they contribute a significant amount of hazeforming chemicals.

Dish, Texas, is one of the few communities where studies have been conducted regarding the correlation between natural gas drilling and health impacts. The study was not large enough, nor well enough controlled, to safely draw many conclusions. But several facts from the study are worth mentioning. Ambient air in Dish sampling revealed 16 chemicals in excess of Texas's short-term and long-term effects Screening Levels. The health problems being experienced by DISH community residents corresponded with those chemicals detected in the air. Due to concerns about air pollution, Texas is also monitoring the Dallas/Fort Worth area immediately to the south of Dish.

Another study, commissioned by Department of Health and Human Services, took place in Garfield County, CO, in response to a large number of health complaints. Air quality monitoring done showed that exposures to air pollution "pose an indeterminate public health hazard for current exposures." Then they note that the estimated theoretical risks for benzene for a particular area, appeared to be significantly higher than those in typical urban and rural areas, causing some potential concern.

What was most striking to me in attempting to research health impacts of gas drilling is the absolute lack of significant studies. However, the preliminary research indicates that much more research needs to be done, particularly in the area of effects on children, who could be at greater risk than are adults from certain kinds of exposure to hazardous substances, and on effects on unborn children since benzene and other chemicals can pass through the placental barrier and into mothers' breast milk. For these reasons, the American Academy of Pediatrics, NYS District, representing more than 6,000 pediatricians, has come out in support of a bill that will delay gas drilling until the EPA study is completed.

Statements from Mary Jane Uttech, Deputy Public Health Director, Cortland County at the June 4th, 2010, showing of the movie "Gaslands" in Homer, NY