



I, PAUL RUBIN, certify pursuant to the penalty of perjury under 28 U.S.C. 1746, that:

1. I am a hydrogeologist and hydrologist with thirty-seven years of professional experience. I earned a B.A. degree from the State University of New York at Albany in 1977 and an M.A. degree in geology with a specialty in hydrogeology from the State University of New York at New Paltz in May, 1983. My professional experience includes work conducted for the New York State Attorney General's Office (Environmental Protection Bureau), Oak Ridge National Laboratory (Environmental Sciences Division), the New York City Department of Environmental Protection, and as an independent environmental consultant as President of HydroQuest. My educational background and professional experience are more fully set forth in my Curriculum Vitae, attached as **Exhibit A**. All or most exhibits referenced in this affidavit and relied upon are attached hereto and incorporated by reference.

2. Within the broad field of hydrology, I have specialized expertise in both surface water and groundwater hydrology. Beyond this, I have specialized expertise in contaminant transport in fractured bedrock, unconsolidated and karst aquifers. I have conducted detailed assessments of streams, wetlands, watersheds, and aquifers for professional characterizations, for clients, and as part of my own personal research. I have authored numerous reports and affidavits related to this work and have made presentations to judges, the NYS Assembly, the NYS Senate, and others. In addition, I have published papers and led all-day field trips relating to this work at professional conferences. In 2014, I testified before judges in Florida and Pennsylvania.

3. In the last five years I have been called upon by a number of environmental groups and law firms to address hydrogeologic, contaminant transport, and environmental issues associated with hydraulic fracturing. A synopsis of this work is attached as **Exhibit B**. This work has been delivered in the form of various reports, presentations, and fact sheets. In addition, as a knowledgeable and concerned hydrogeologist, I have independently constructed and delivered testimony on the dangers of hydraulic fracturing to our freshwater aquifers to the Citizens Marcellus Shale Commission in Philadelphia, PA on September 6, 2011, to the New York State Assembly Standing Committee on Environmental Conservation in Albany, New York on October 6, 2011 and to the New York State Senate on April 25, 2012. My experience in contaminant transport assessments also includes numerous disposal and spill sites including Love Canal, the West Valley nuclear waste site, manufacturing facilities, and gas stations.

4. This affidavit is in support of the Bullville Volunteer Fire Department's efforts to obtain clean, potable, groundwater that is not contaminated by methyl tertiary-butyl ether (MTBE), a potentially carcinogenic gasoline additive (EPA), and volatile organic chemicals derived from hydrocarbon spills at the VEO Express Lanes Mobil gas station. The physical area addressed in this affidavit is situated proximal to State Route 17K in Bullville, New York (Figure 1). My analyses, conclusions, and recommendations are based upon generally accepted scientific principles. Plaintiff's lack of regular inspection, failure to detect chemical leaks, product releases (i.e., spills), and incomplete cleanup in Bullville, NY have resulted in significant and