Dr. Paul Anastas's November 2011 Statement on the Release of the Final Hydraulic Fracturing Study Plan (as prepared for delivery)

Good morning. Thank you for joining me today to hear about EPA's finalized plan to study the potential impacts of hydraulic fracturing on drinking water resources and progress we have made to date. As you know, in Fiscal Year 2010, the U.S. Congress directed EPA to conduct research to examine the relationship between hydraulic fracturing and drinking water resources. This direction was in response to escalating public concern and anticipated growth in natural gas exploration and production.

Congress specifically requested that EPA's study:

- **Use the best available science and independent sources of information;**

- **Use a transparent, peer-reviewed process that will ensure the validity and accuracy of the data;**

- **And be conducted in consultation with other Federal agencies as well as appropriate State and interstate regulatory agencies.**

As directed, EPA designed a study with the clear goal of determining whether hydraulic fracturing may have an impact on drinking water resources, and if so, what the driving factors for those impacts may be. At every step in the development of the study, we have fulfilled our commitment to Congress by using a transparent peer-review process, the best available science, independent sources of information, and EPA's most rigorous quality assurance procedures.

Over the past year, EPA has also conducted extensive outreach to the public, the scientific community, and interested stakeholders. We have held numerous public meetings, webinars, and technical workshops and provided multiple opportunities for industry and the public to provide input into the study's design.

In addition, rigorous peer review played a central role in the development EPA's study. Consistent with the Agency's Peer Review Handbook, we engaged the Science Advisory Board, or SAB, in the early stages of research design. The SAB provided comments on our proposed research approach on two occasions.

We addressed those comments and modified our approach as appropriate. You can find Administrator Jackson's detailed response to the SAB comments posted publicly on our web site.

EPA will release the first report on the study in 2012, and a second report in 2014. Both reports will undergo independent peer review.

Because all parties interested in the outcome of this study are eager to have timely results, we have initiated some preliminary activities that are needed to provide a foundation for the full study. All of these initial activities were explicitly described in EPA's draft study plan and supported by the SAB during its peer review. They are also fully described and incorporated in the final study plan we are releasing today. In addition, we have communicated, and will continue to communicate our plans and activities with all of our stakeholders. Our approach has been and will continue to be transparent.

To summarize the work we have started to date, on September 9, 2010, EPA issued voluntary information requests to nine leading national and regional hydraulic fracturing service providers.

The information requested included the chemical composition of fluids used in the hydraulic fracturing process, data on the impacts of the chemicals on human health and the environment, standard operating procedures at hydraulic fracturing sites and the locations of sites where fracturing has been conducted.

These data are critical to understanding potential relationships between hydraulic fracturing and drinking water—the primary goal of the study.

Another part of our study involves the review of well file data obtained from well owners and operators. We first expressed our interest in these data on September 9, 2010 when we announced our initial information request to industry and again when we released the draft study plan on February 7, 2011. On August 10, 2011, we requested detailed information from 350 randomly chosen well files of nine randomly chosen oil and gas well owner/operators. The letter requesting this information explained in detail the rigorous process we used to select wells for further investigation and how we intended to use the data. Industry is now cooperatively supplying this data.

On June 23, 2011, EPA announced its selection of locations for five retrospective and two prospective case studies. Information posted on our website included the case study locations, key issues to be investigated, possible outcomes of the research, and criteria for case study selection.

Scientific integrity is central to all of our work at EPA. We are taking every step to ensure that this study is carried out in a manner that is scientifically rigorous and uses the highest quality data. Quality assurance project plans, which are scientifically-deliberative documents that describe the methods and quality assurance protocols used in our research studies, have been completed and approved for every retrospective case study. Our quality assurance plans require audits of data, and sample analyses are subjected to on-site audits. We follow these established procedures to assure that only valid data are used in our reports.

EPA will also continue to be transparent about our testing procedures. At each of the retrospective case study site locations, EPA has provided sampling plans to well owners and operators associated with those locations. This information provides a sound scientific basis for other interested parties to conduct concurrent, parallel studies in the area and replicate key processes that we will use in our study. In the case of prospective case studies, we are working closely with our industry partners to define the locations and parameters for our research.

We will proceed with the study in a scientifically rigorous and expeditious manner. Initial information collection and research have begun in order to lay the groundwork for the full implementation of the study and to ensure that results become available in a timely manner. This initial work and all activities to follow are entirely consistent with the proposed study plan, from sample locations to overall technical approaches. The final study plan is completely consistent with all the work underway.

We will continue to share information with research partners and allow others to design comparable work. Independent peer review was a critical part of developing the study plan and will likewise be critical as we develop the final reports for the study.

As our work progresses, we will engage interested parties through quarterly updates on activities related to the hydraulic fracturing study and continue to communicate with all stakeholders – including industry, state, local, and tribal governments, non-governmental organizations, and citizens.

EPA's hydraulic fracturing study is based on the strong principles of scientific integrity and transparency – the American people deserve no less.