

**USDA Pesticide Data Program  
Water Monitoring Survey Overview  
11 March 2004**

**Objective**

The goal of the Pesticide Data Program (PDP) Water Monitoring Survey is to collect monitoring data on pesticide residues. The data will be used by the Environmental Protection Agency (EPA) in water models to perform human health and environmental fate risk assessments.

**Background.**

Pesticide residue data in drinking water are necessary to support the Food Quality Protection Act (FQPA) enacted by the U.S. Congress in 1996. The PDP water monitoring survey was begun 2001 when Congress allocated money to AMS for the purpose of providing these data. The PDP water survey is designed in consultation with EPA, the agency responsible for implementation of FQPA, to provide data for agricultural use pesticides under evaluation. The sampling frame is designed to provide coverage in regions of interest for at least two years, to reflect the seasonal and climatic variability during growing seasons.

PDP works with EPA and The American Water Works Association (AWWA), an organization of water supply professionals, to identify specific water treatment facilities where monitoring data are needed. PDP solicits water treatment facilities for voluntary participation in the program. Personnel at the water treatment facilities collect the samples with a kit provided through an AMS subcontractor. Samples are then mailed to PDP laboratories for analysis. In return, PDP provides the analytical results to the facilities through quarterly updates.

In 2001, PDP began monitoring of several community water systems in New York and California. In FY 2002, the monitoring was expanded to include 5 additional community water systems in 3 more states; Colorado, Kansas, and Texas. Samples were analyzed at State Department of Agriculture laboratories in California, Colorado, and New York. Sampling at these sites ended in December 2003.

In January 2004, collection began at 16 new sites in Michigan, North Carolina, Ohio, Oregon, Pennsylvania, and Washington State. PDP is collecting paired samples of both raw water at the intake and finished water exiting the plant. The finished water samples are taken based on the throughput time of the plant to be as close as possible to the same parcel of water taken for the raw sample. These paired samples provide additional information on treatment efficiencies and environmental exposures. The laboratories analyzing these water samples include State Department of Agriculture laboratories in Colorado, Montana, and New York.

## **Testing Protocols**

PDP laboratories use multi-residue water methods for water analyses. Methods are validated before the data are accepted. Quality assurance and quality control measures are used to verify analytical results. All PDP laboratories are working towards ISO 17025 accreditation. Specific information regarding analytes, limits of detection, methods, and quality assurance are available at <http://www.ams.usda.gov/science/pdp/Water.htm>.

## **Data Reporting**

Data are sent electronically by testing laboratories to PDP Headquarters in Manassas, VA. USDA publishes the data in the PDP Annual Summary, available at <http://www.ams.usda.gov/science/pdp/Status.htm>. PDP protects proprietary information when publishing data. Interim data are available to program participants; however, PDP reserves the right to be the first to publish these data. Interpretation of these data (such as health consequences of a positive finding) is beyond the scope of PDP activities. As the geologic, hydrologic, geomorphic, land use, climate conditions, and populations are unique to each watershed, the data reflect conditions in the watershed and not national trends.