



National Atmospheric Deposition Program

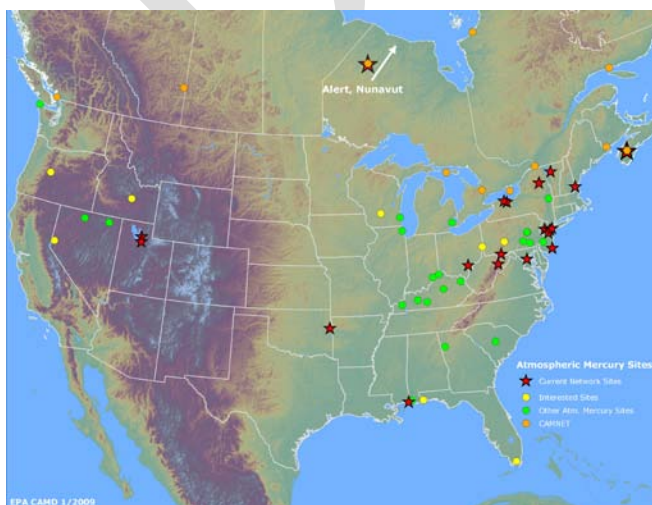
The NADP has accepted the AMNet as a fourth network to monitor the atmospheric concentrations of speciated mercury fractions, and to support dry deposition estimates, emission regulatory assessments, model evaluation, and long-term trends. Monitoring and analysis of elemental, gaseous oxidized and particulate Mercury fractions would use a 2.5-micrometer impactor and KCl-coated annular denuder (for ionic mercury), thermally-desorbed particulate filter (for particulate-bound mercury), and gold traps (for elemental mercury). Analysis uses cold vapor atomic fluorescence spectroscopy (CVAFS).

There are three major goals for the AMNet:

- determine the status and trends in concentrations of atmospheric mercury fractions (reactive gaseous, particulate-bound, and elemental) in select locations;
- offer high-quality measurements to estimate dry and total deposition of atmospheric mercury to aquatic ecosystems and other areas of interest on the local, regional, and global scale; and
- provide data for atmospheric mercury model development, validation, and improvement.

NADP's primary network responsibility is to assure that the network data are accessible, quality assured, and comparable. Specifically, NADP will:

- coordinate the network through the established, transparent, collaborative NADP process;
- produce sampling and analysis standard operating procedures;
- produce quality assurance procedures and auditing services to provide confidence and consistency in network data;
- provide data management and validation; and
- provide multi-station data in a forum that supports mercury research, modeling efforts, and informed policy decisions.



Currently 20 AMNet sites are operating using standard procedures, with over 28 site years of quality-assured, mercury speciation data posted on the NADP website (<http://nadp.sws.illinois.edu/amn/>).