# National Atmospheric Deposition Program's Atmospheric Mercury Network

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#### Abstract

The NADP Atmospheric Mercury Network (AMNet) is a collaborative effort involving many federal, state, and tribal agencies, academic researchers, and industry partners across North America and Taiwan. AMNet was initiated by the NADP Executive Committee in October 2009. The network monitors, summarizes, and reports atmospheric mercury species which contribute to dry and total mercury deposition. At each station, the following data are collected: concentrations of atmospheric mercury species from automated, continuous measuring systems; and concentrations of total mercury in precipitation. Data are collected with standardized methods, quality assured and archived in an NADP online data base.

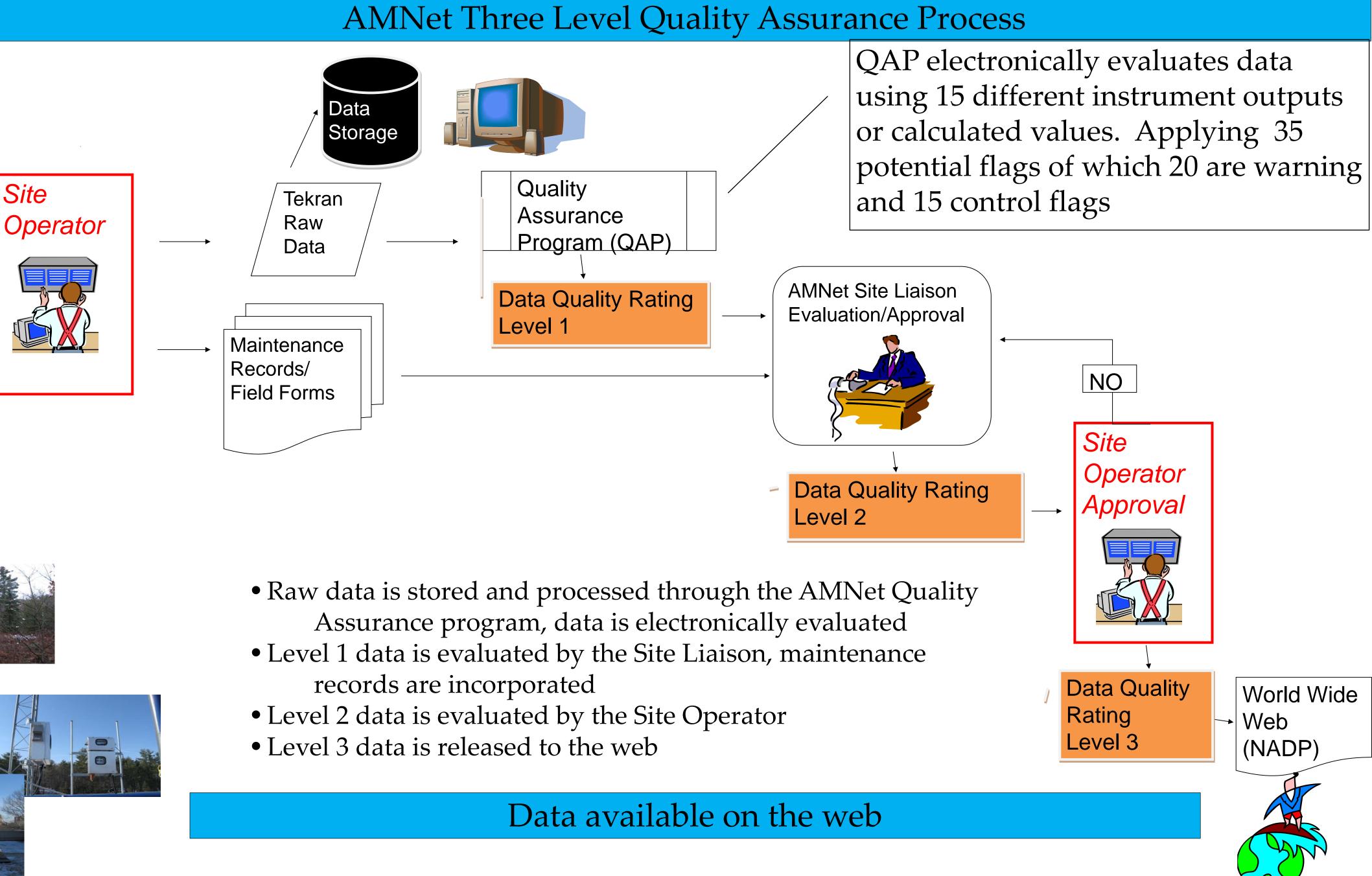
There are several specific objectives for this network:

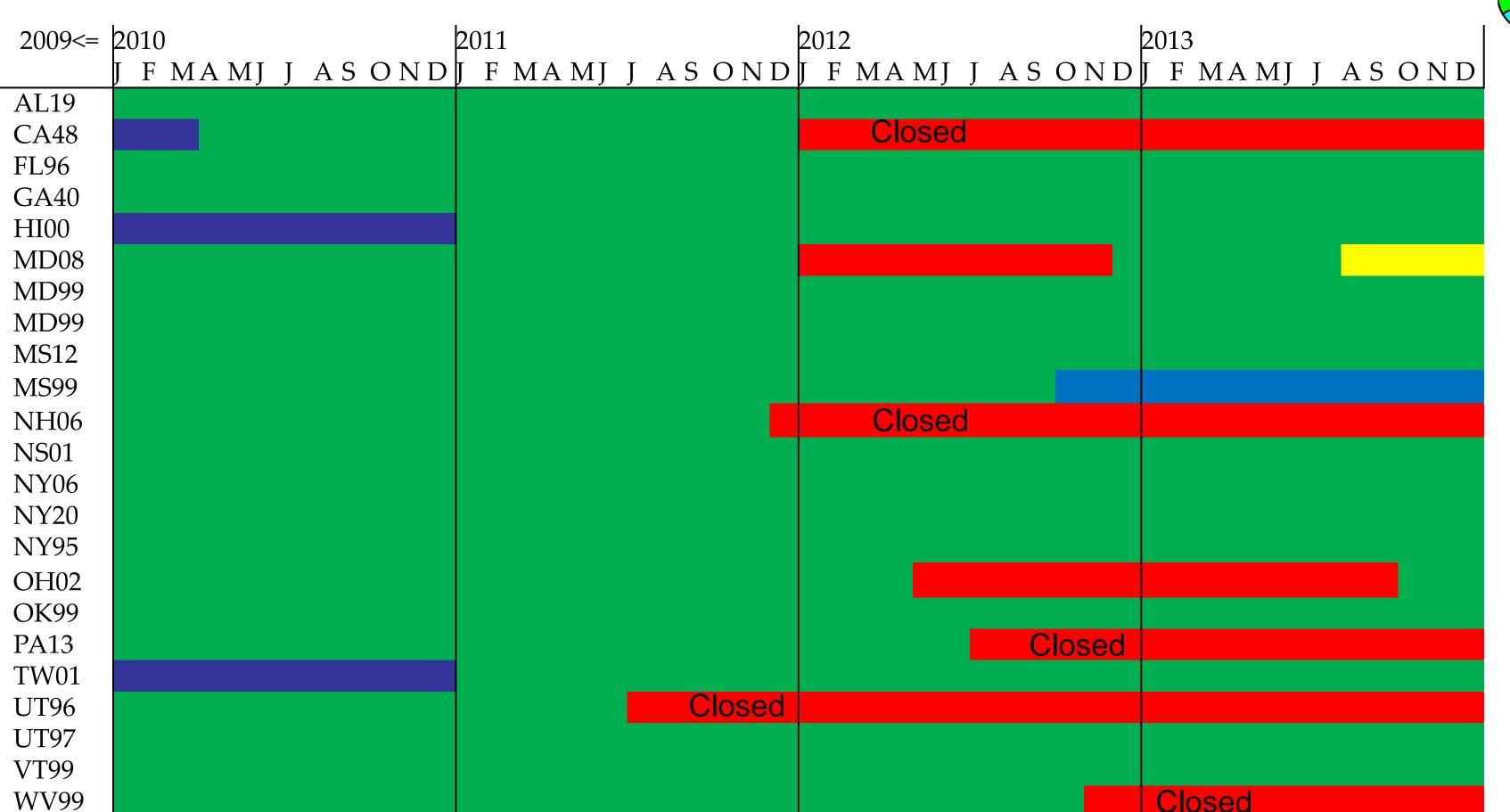
- determine the status and trends in concentrations of atmospheric mercury species (gaseous oxidized, particulate-bound, and elemental) in select locations;
- offer high-quality measurement data to estimate dry and total deposition of atmospheric mercury to aquatic ecosystems and other locations influenced by emissions and transport on the local, regional, and global scale; and
- offer high-quality data necessary for atmospheric mercury model evaluation and development.

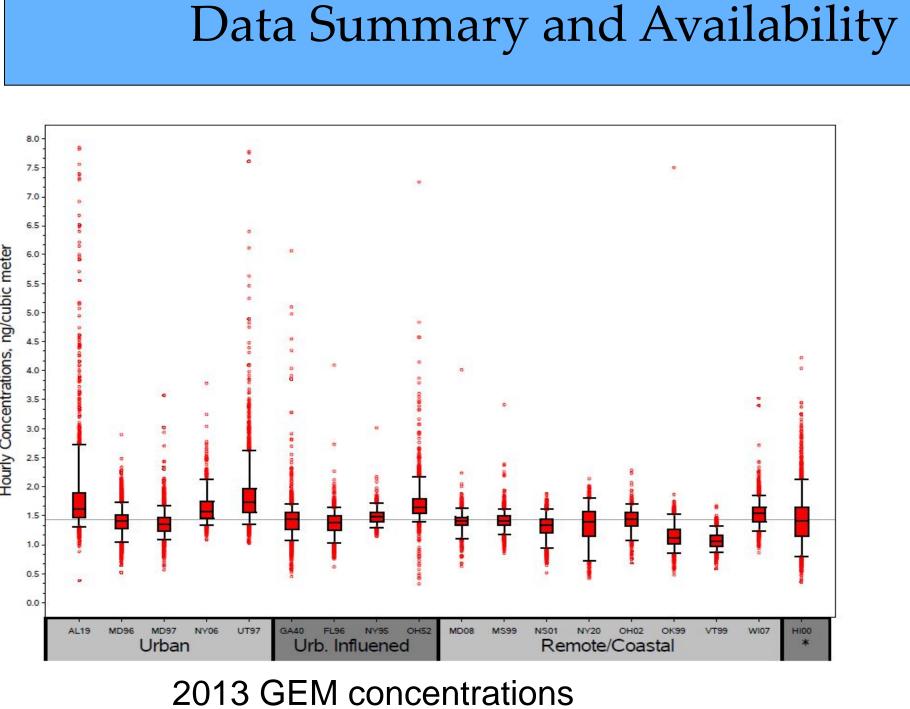


#### Site Liaison

- Help maintain sites through initial quality review of the data and all instrument performance.
- Provide on-site operator training and site performance evaluations
- Implement harmonized field site and data management procedures
- Oversee QA of the network.
- Provide technical support and spare parts for troubleshooting.







AMNet Over 110 site years of atmospheric mercury data

## 3 GEM concentrations 2013 GOM (red) and PBM (green) concentrations

### Network Functions Si

- Expertise in mercury monitors and their operation
- o Standard Operating Procedures; field and data
- Reporting and data quality systemPhone and onsite support
- Quality assurance of all GEM, GOM, and PBM data
- o Automated flagging
- o Valid/invalid determinations
- o Overview by experts in the field
- Annual site visit
- o Additional training
- o Flow and calibration assessments
- o Inspection and problem correction

• Future estimates of dry mercury deposition.