



Forensic Field Investigations NEIC's Field Support Capabilities

Support Areas:

- Civil and criminal investigations, field measurements, sampling and laboratory support
- Process-based industrial facility investigations (single and multi-media)
- Sampling and analysis to support investigation observations
- Strategic planning from a national perspective
- Expert services, consultation, reports, testimony, field sampling plans, etc.
- Training - classroom style and on-the-job

Key Personnel:

- Doreen Au – CAA, Mobile sources, CAA 112r
- Armando Bustamante – CAA, EPCRA
- Jeremy Deyoe – CAA 112r, EPCRA non-313
- David Dugan – RCRA
- John Fowler – RCRA
- Lorna Goodnight – RCRA
- Jamie Iatropulos – CAA
- Michael Lukowich – CWA
- Craig Lutz – RCRA
- David Parker – SDWA-PWSS
- Trent Rainey – CWA, CAA 112r
- Matt Schneider – CAA
- Stewart Simpson – Compliance sampling
- Bill Squier – Mobile sources, Compliance sampling
- Mark Stead – CAA
- Jacob Stowell – RCRA
- Daren Vanlerberghe – CWA, SDWA-PWSS
- Jackie Vega – RCRA

Who is NEIC?

EPA's National Enforcement Investigations Center (NEIC) is the environmental forensics center that supports complex civil and criminal investigations for EPA's enforcement programs across the country. NEIC's mission is to serve as EPA's fully accredited forensics laboratory and provide for multi-disciplinary expert teams to conduct field investigations to gather and evaluate evidence and perform analytical services. NEIC provides support by gathering data, providing engineering evaluations, analyzing forensic evidence, supplying legally defensible data, serving as expert witnesses in the courtroom, and providing investigation training.



NEIC field staff: NEIC field staff are cross-trained in a variety of media with experience working across the country on a wide variety of civil and criminal projects. NEIC's forensics-based field sampling/measurements and laboratory analyses are accredited under ISO/IEC: 17025, *General Requirements for the Competence of Testing and Calibration Laboratories*.

Civil Investigators conduct both single-media and multi-media investigations

- Evaluate industrial, federal, and municipal facilities
- Employ process-based approach: investigators first gain understanding of facility product and waste processes and then evaluate compliance

NEIC Technical Coordinators (NTCs) conduct criminal investigations

- Provide forensic field sampling and measurement in support of EPA's Criminal Investigation Division (CID) during all phases of criminal investigations
- Co-located with CID Special Agents in six area offices, provide front-line support at the earliest stages of investigations

NEIC's investigators are credentialed in the following media programs:

- Clean Air Act (CAA)
- CAA Mobile Sources
- CAA 112r
- Clean Water Act (CWA)
- Emergency Planning and Community Right-to-know Act (EPCRA)
- Resource Conservation and Recovery Act (RCRA)
- Safe Drinking Water Act (SDWA) Public Water System Supervision (PWSS)
- Compliance Sampling (field sampling with expertise in water/wastewater sampling, waste stream analysis, drum and tank sampling, air monitoring and sampling, and others)



Why use NEIC?

- NEIC's scientists and engineers are experts in conducting compliance investigations at all types of industrial, federal, and municipal facilities.
- NEIC can investigate facilities where there are nationally significant, technically challenging, multi-regional, or politically sensitive issues.
- NEIC collects forensic evidence (process samples, field measurements, etc.) using fully accredited methods designed to withstand scrutiny in the courtroom or during settlement negotiations.

Types of facilities NEIC investigates: petroleum refineries, hazardous waste treatment facilities, hazardous waste landfills, chemical plants, federal facilities, mining operations, pulp and paper mills, pharmaceutical manufacturers, coke oven and byproduct recovery facilities, natural gas producers and refineries, and municipal and industrial wastewater treatment plants.

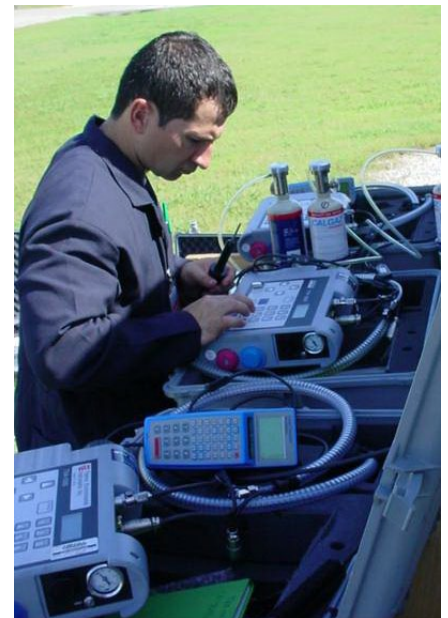
NEIC develops and employs innovative enforcement tools: NEIC works with EPA's headquarters, Office of Research and Development (ORD), and regional enforcement programs to develop and evaluate innovative field technologies to create efficiencies and expand capabilities on civil and criminal investigations.

Newly developed enforcement tools include:

- Geospatial measurement of air pollution (GMAP) – a real-time mobile or stationary air monitoring technology that identifies sources of air pollution and quantifies emissions. Collected data is plotted on maps and figures.
- Integrated monitoring platform for remote environmental sensor systems (IMPRESS) – a real-time continuous monitoring platform that can be controlled remotely to monitor and collect water samples using off-the-shelf sensor technology.

Results: NEIC's field staff have conducted a total of 887 civil investigations and 793 criminal cases across all EPA regions in the past ten years.

- At the request of EPA Region 9, NEIC conducted a civil investigation of the Asarco copper smelter in Hayden, Arizona. In response to NEIC's findings, Asarco was fined \$12.5 million and was required to install \$150 million in air pollution control technologies that are estimated to have reduced air emissions by 3,500 tons per year (tpy) of particulate matter; 8.5 tpy of metal hazardous air pollutants (HAP); and 19,000 tpy of sulfur dioxide (SO₂).
- After conducting a process-based investigation that yielded criminal in addition to civil findings, NEIC provided support to EPA's CID with the collection of evidence at the Tonawanda Coke Corporation's facility in New York. NEIC's investigations resulted in a \$12.5 million fine, and funding \$12.2 million for a soil study and a 10-year epidemiological study of the health effects of coke oven gas. The facility's environmental manager was also sentenced to a year of incarceration and a \$20,000 fine.



How to obtain NEIC's support

If you would like more information on NEIC or to request field and/or laboratory support, technical assistance, or training from NEIC, please contact us at neic_project_requests@epa.gov. You may also contact your regional enforcement coordinator for more information on requesting NEIC's support on civil projects and EPA's CID for support on criminal projects.