

SOMERSET COUNTY DEPARTMENT OF HEALTH
County Environmental Health Act Program

-ANNUAL REPORT SUMMARY-
2010 ENVIRONMENTAL HEALTH ASSESSMENT & IMPROVEMENT PLAN

Purpose & Authority

This Assessment and Improvement Plan has been developed and is updated annually to address environmental issues and describe environmental health activities and goals within the Somerset County Department of Health. The Plan will outline ongoing and proposed services that will improve our efforts to increase environmental quality for the residents of the County of Somerset.

The Somerset County Board of Chosen Freeholders created the Somerset County Department of Health (SCDOH), pursuant to *N.J.S.A. 26:3A2-1 et seq.*, to provide environmental health services throughout the County. Focus areas include solid waste compliance monitoring, air quality, water quality, and community noise enforcement. Since 1992, SCDOH has conducted compliance and enforcement activities as a New Jersey Department of Environmental Protection (NJDEP) certified agency, under the County Environmental Health Act (CEHA). This gives SCDOH authority to enforce applicable environmental State Statutes and Administrative Codes. The Department and its certified subcontracting agencies investigate citizen complaints, perform routine NJDEP delegated inspections and provide public information and education services in matters concerning environmental health. SCDOH gathers evidence of violations as required and pursues enforcement when indicated. SCDOH is authorized to issue civil administrative penalties and convene settlement negotiations with violators of NJDEP regulations. A full overview of the County Environmental Health Act is available at: <http://www.nj.gov/dep/enforcement/olem.html>

The Somerset County Department of Health also serves as the full time public health department for the municipalities of Bedminster, Far Hills, Franklin, North Plainfield and Rocky Hill, while public health issues within the other 16 municipalities of the County are addressed by 7 other distinct local health agencies. SCDOH serves as the central agency for the County's Local Information Network Communications System (LINCS), the State designated coordinating agency for County-wide Public Health Emergency Preparedness, and has established a Governmental Public Health Partnership (GPHP) to support and guide the development of environmental and public health services within the County.

Community Background

Somerset County, located in the heart of central New Jersey, occupies an area of 305 square miles with a diverse mix of urban and suburban neighborhoods and rural countrysides. Established in 1688, the County is one of the oldest in America and historic sites are found in virtually all of its 21 municipalities. The 2006 population estimate was 324,186, with a population density of 1,059 people per square mile. Somerset County remains one of the most rural counties in the State, with 23% of the land devoted to agriculture. Nonetheless, the population has increased 8.97% over 2000 levels, compared with 3.69% growth throughout the State from 2000 through 2006. Over 27% of the County's population is below 18 years of age. Smart growth and preserving open space are important issues to County residents. The County has preserved over 6,710 acres of farmland, and the Somerset County Park

Commission maintains over 9,500 acres of open space including five parks, several golf courses, hiking and bicycling trails, picnic areas, an Environmental Education Center and the County Fairgrounds. Somerset County residents enjoy a relatively low rate of poverty and relatively high rate of homeownership. The 2006 per capita income was approximately \$43,407, with a median household income of approximately \$91,688, and the County's unemployment rate, as of 2006, was about 5.1%. Somerset County attracts and retains well-known corporations including pharmaceutical and life sciences companies. The County's diversity of landscape, historic sites, educational facilities, parks, and outstanding business and industry all make Somerset County a desirable location to live and work.

Personnel and Equipment

The Somerset County Department of Health currently maintains a full-time staff of 18 professionals consisting of: Director of Public Health, Epidemiologist, 2 Health Educator/Risk Communicators, Environmental Health Coordinator, 3 CEHA Public Health Inspectors, 5 Registered Environmental Health Specialists, a Public Health Nurse, Practice Standards Coordinator, LINCIS Coordinator, Office Manager and an Administrative Assistant. A majority of these positions are currently grant-funded by either the State Health Department (NJDHSS) or the NJDEP. SCDOH also oversees the grant administration for the contractual positions of the Somerset County Medical Reserve Corps, the Somerset County Cancer Coalition, and the Somerset County Chest Clinic.

SCDOH field staff utilize equipment that includes five GPS units (three hand held units and two back pack units), GIS supporting software and plotter, laptop computers, digital cameras, portable radios and cell phones, a video camera, vehicles for inspection staff, weather monitoring equipment and range finder for air inspections, and two certified noise meters. All vehicles are equipped with mobile radios and inspectors are provided appropriate personal protective equipment. All professional staff are available to respond to public health and environmental emergencies on a 24/7 basis.

Environmental Issues and Program Goals

Clean Air

The Somerset County Department of Health is committed to reducing the impact of air pollution in Somerset County. Our goal is to ensure that air throughout the County is healthful to breathe and that air pollutants will not damage our forests, land, water bodies, or properties. The NJDEP monitors air quality indirectly for the County through sampling stations surrounding the County, with several located in both Middlesex and Morris Counties, and one in Flemington (Hunterdon County). Pollutants monitored include carbon monoxide, nitrogen dioxide, ground level ozone, particulates, and sulfur dioxide. Further information and reports on historical trends in air quality can be found at <http://www.njaqinow.net/>. Overall, maximum pollutant concentrations have declined steadily and significantly since 1967. However, ground level ozone and particulate pollution remain a concern in New Jersey.

Ground level ozone (sometimes called smog) is formed as a by-product of volatile organic chemicals and nitrous oxides emitted from motor vehicle exhaust, industrial facilities and gasoline vapors. Ozone is implicated in health issues such as asthma and increased susceptibility to respiratory illnesses, to environmental damage including reduced crop yields and tree leaf damage. SCDOH works closely with NJDEP initiatives to reduce ozone-forming

emissions wherever possible, such as participating with idling surveillance sweeps throughout the year.

In 2008, inspectors conducted 111 routine NJDEP-delegated inspections. Facilities included business locations containing regulated boilers or emergency generators, gasoline service stations, and dry cleaning shops. This inspection level has remained consistent to-date in 2009, however with the removal of gas station inspections and an increased focus on locating unpermitted boilers and generators. SCDOH also responded to 97 complaints involving air quality issues in 2008 and has responded to 58 air pollution complaints through September 30, 2009.

Activities for 2010 will include continued routine compliance inspections of permitted facilities, and enforcement where indicated. Focus areas will include auto body paint shops and facilities with emergency generators. SCDOH will promptly respond to NJDEP referrals and citizen complaints of odors, dust, open burning, and other sources of particulate emissions. Routine idling enforcement in problem areas will be continued as staff availability allows. Staff will maintain certifications in Visible Emissions and Odor Field Enforcement.

Clean Water

Somerset County residents are concerned about having sufficient quantities of clean ground and surface water for consumption and recreational purposes. Drinking water sources are varied throughout the County, with urban and suburban communities utilizing public water supplies and the vast majority of rural communities relying on private well water.

The Somerset County Department of Health plays an active role in the oversight and regulation of public non-community ("PNC") water sources. Any drinking water well which has the potential to serve 25 or more persons, for at least 60 days in a given calendar year, falls under the scope of the CEHA program, and these systems are required to perform various levels of water quality analyses each year to ensure a safe and potable drinking water supply.

In 2008, 50 routine PNC inspections were conducted and, in general, most facilities were found to be in substantial compliance with Safe Drinking Water Act regulations. In most cases, quarterly and annual testing results are satisfactory and communicated to NJDEP in a timely fashion. In the event water quality testing is not conducted, SCDOH pursues immediate enforcement of the Safe Drinking Water Act under NJDEP's zero tolerance policies.

When water quality standards at a public water system are not met, SCDOH ensures that appropriate follow-up, public notification, and treatment occurs. Similar inspection levels are expected for 2009, in accordance with NJDEP's delegated inspection protocols. In 2010, SCDOH will continue to provide information to the regulated community regarding maintenance and upkeep of their water treatment and distribution systems, as well as guidance on emerging federal groundwater regulations. SCDOH has developed a mandatory, standard application/approval form for PNC systems requiring physical alterations and/or wishing to install water treatment devices. This ensures that the system receives the appropriate oversight and any changes to the water system remain in compliance with the Safe Drinking Water Act. Finally, a small portion of Somerset County is located within the Preservation Area of the Highlands Region. SCDOH is responsible for the review and approval of any PNC installations or system modifications within this Area.

SCDOH also serves as an intermediary for results obtained through the Private Well Testing Act. Water quality information from residential real estate transactions is reviewed by SCDOH, adding to our knowledge of County-wide trends, and then transmitted to the local health department authority. The local health officer has the final say in any decision to provide public notification of contamination, or to recommend testing of surrounding residences. Over 300 PWTA analyses were reviewed in 2008 and over 160 reviewed in the first half of 2009.

NJDEP summary data from September 2002 through April 2007 showed arsenic and coliform bacteria to be the greatest contaminants of concern in Somerset County. Out of 2,689 wells sampled, 122 showed fecal bacterial contamination and 489 had levels of arsenic above guidelines. Bacterial contamination of a well can be the result of nearby septic system malfunction and/or physical deterioration of the system itself.

On January 23, 2006 the NJDEP lowered the Maximum Contaminant Level (MCL) for arsenic to 5 parts per billion (ppb). This MCL is more protective than the Federal Standard of 10 ppb. This small difference between exceedance criteria has greatly affected the residents of Somerset County. According to the State's data, over 70% of those homes that failed for arsenic failed with levels between 5-10ppb. Arsenic is a naturally occurring compound found in abundance in some areas of Somerset County. The municipalities most affected include Montgomery, Hillsborough, Branchburg and Franklin, which are all found in the geologically defined Piedmont Province. NJDEP's full report can be found at: <http://www.nj.gov/dep/pwta/>

Surface water quality is also an important issue in Somerset County, with EPA data showing a significant portion of surface water bodies having some form of impaired quality (<http://cfpub.epa.gov/surf/locate/index.cfm>). SCDOH is committed to ensuring that rivers, lakes and streams will be fishable, swim-able and support healthy ecosystems. Somerset County has an excellent supply of water in the region, since the major reservoir system of New Jersey, Round Valley and Spruce Run, feeds directly into the Raritan River, which traverses Somerset County. Additionally, the Delaware and Raritan Canal traverse the southern portion of the County.

Since 2005, SCDOH has assisted the NJDEP in ambient surface water monitoring. SCDOH also works in partnership with our County Engineering Department to analyze information collected from NJDEP's storm water regulations with the goal of decreasing the amount of illicit connections and potential pollution in County waterways. SCDOH works cooperatively with NJDEP, municipal agencies, watershed associations, the water supply authority, the Somerset-Union Soil Conservation District and the Somerset County Division of Mosquito Control to identify illegal discharges, and monitor the quality of the County's rivers and streams. Through this and other efforts, the CEHA program has increased its focus on prevention and enforcement of violations of the Water Pollution Control Act. By working in conjunction with Local and County Emergency Management officials, investigations of significant environmental releases are conducted to determine if a responsible party has violated these regulations.

Solid Waste & Recycling

The Somerset County Department of Health is committed to ensuring an environment free from illegal dumping and unsafe solid waste transportation and disposal facilities. The solid waste program is therefore an important and significant part of our delegated CEHA activities. Field staff conducted 39 routine solid waste and recycling center facility inspections, 71 recycling compliance evaluations, and performed 185 field investigations during 2008, which included compliance evaluations of solid waste haulers, investigations of abandoned or

illegally dumped materials, and inspections of tire sites referred through the County's Mosquito Control Division. A similar inspection level has been maintained to-date in 2009, as well as the addition of closed landfill inspections. SCDOH also conduct interviews on behalf of NJDEP for solid waste transporters seeking A-901 exempt status.

In 2010, SCDOH will continue to perform routine compliance inspections of solid waste facilities within the County, including one privately owned transfer station and intermodal facility, several recycling centers, citizen drop-off sites, farmland mulch sites and compost facilities. Additionally, improperly maintained waste collection equipment, illegally run collection operations, and violations of waste disposal regulations will be penalized as necessary. SCDOH will continue to play an active role in abating areas of improperly disposed or stockpiled tires, which serve as mosquito breeding habitats.

Finally, SCDOH works collaboratively with both County and Municipal Recycling Coordinators to promote recycling within the business community. The County of Somerset Public Works Department provides curb-side recycling pick-up for its residents and the County's Office of Solid Waste Management sponsors six household hazardous waste days annually, which are monitored by a SCDOH representative.

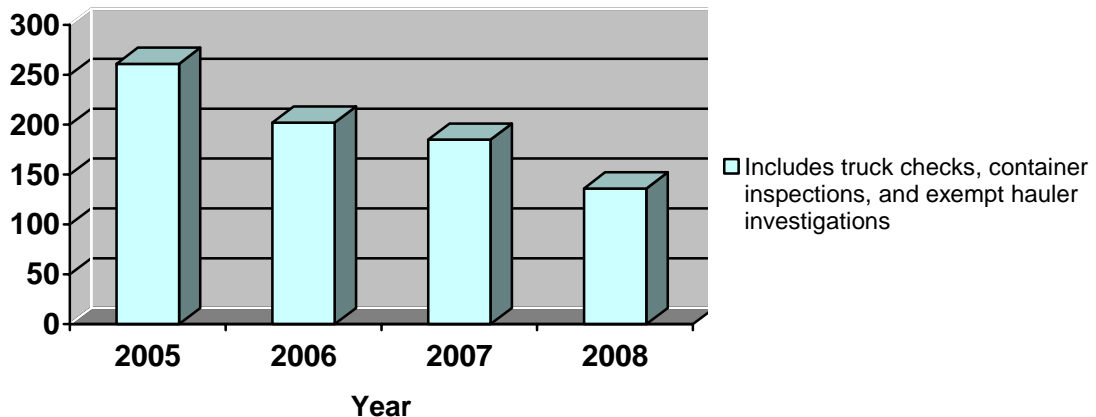
Recycling compliance in the commercial sector is evaluated during the course of other delegated CEHA-inspections. 71 evaluations were conducted during 2008. Results are communicated to the municipal Recycling Coordinators for outreach and education, and enforcement is initiated as needed. These efforts support the NJDEP's goal of increasing the State-wide recycling rate to 50%. More information can be found at: <http://www.nj.gov/dep/dshw/recycling>



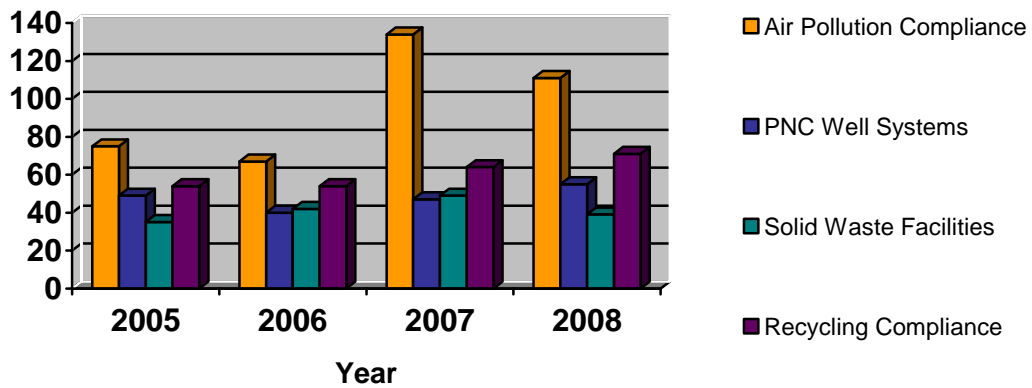
An improperly disposed fluorescent tube. All bulbs and other mercury containing devices must be recycled in Somerset County. A broken tube left in a dumpster will release mercury and, through storm water runoff, can potentially contaminate thousands of gallons of surface water.

CEHA in Action

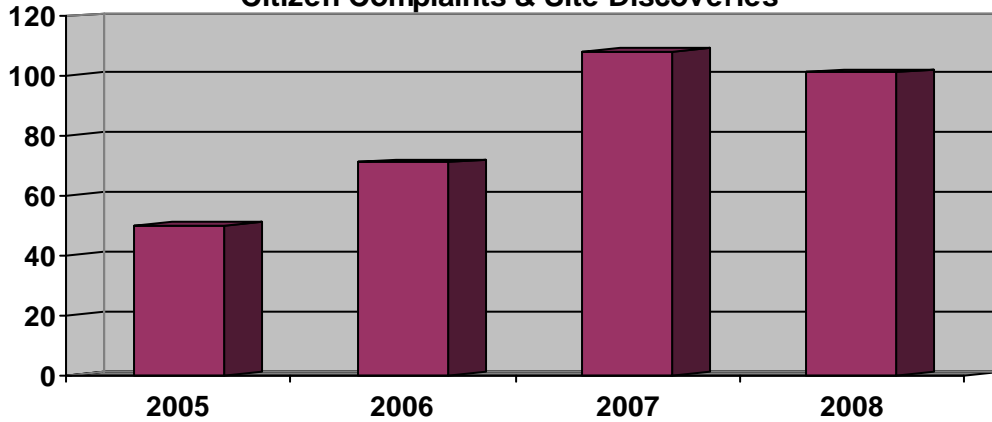
Solid Waste Transporter Investigations 2005-2008



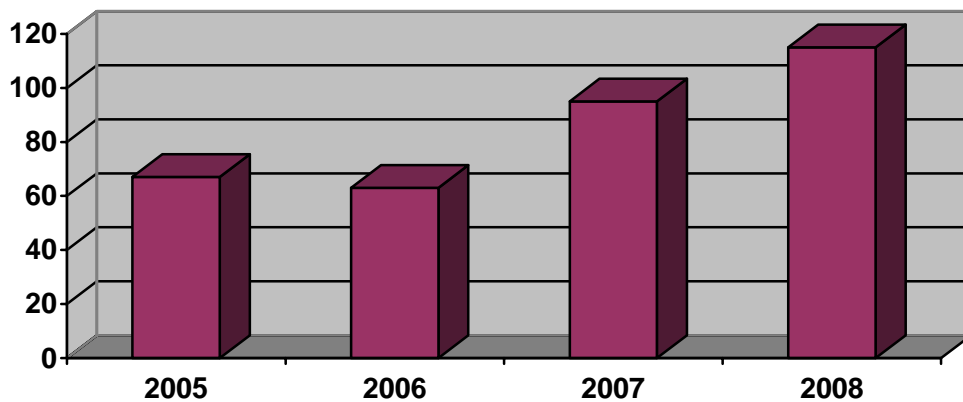
Routine CEHA Inspections, 2005-2008



Citizen Complaints & Site Discoveries



Complaints Referred from NJDEP



**The above charts include routine inspections and/or complaint responses for the following core CEHA-delegated areas: air pollution, drinking water, water pollution control, solid waste & recycling and investigation of low-environmental concern hotline reports.*

A Noise Free Environment

Somerset County residents are concerned about excessive noise that degrades their quality of life. Accordingly, SCDOH is committed to respond to their concerns by appropriate investigation and enforcement of violators of the State Noise Code (N.J.A.C. 7:29). SCDOH employs four professionals certified in Community Noise Enforcement, and maintains two regularly calibrated noise meters to investigate noise complaints. These complaints typically arise in areas where manufacturing and industrial facilities are in close proximity to residential zones. While the number of noise complaints remains low, each incident has significant impact upon the citizens subjected to it. Accordingly, SCDOH will react aggressively to ensure the elimination of unwanted and irritating noise, maintaining the quality of life that Somerset County residents deserve.

In 2008, while only 17 separate complaints were received, each involved multiple follow-up investigations, often during evening hours, in order to assure compliance. It is important to note that many other instances of noise pollution are handled each year at the municipal level, as several townships have adopted the Model Noise Code and pursue enforcement with police officers or local health department personnel. As an agent of the NJDEP, SCDOH is certified only to enforce the State's Noise Code, and may not enforce municipal ordinances. Therefore SCDOH has been an active partner in ensuring that ongoing training and resources are available to local departments.

Hazardous Materials Emergency Response

Somerset County residents must be protected from the health and ecological risks posed by hazardous substances. The safe use, transport and disposal of hazardous materials are therefore overseen by the Somerset County Office of Emergency Management (OEM), which coordinates the County's all-volunteer Hazardous Materials Team. Members are trained and prepared in HazMat investigations, and a portion of CEHA grant funding is utilized for the equipment, medical surveillance and training needs of HazMat personnel. First responders at all levels are receiving comprehensive training in bioterrorism, as well as nuclear and chemical threats. CEHA staff work in partnership with OEM/HazMat personnel to investigate environmental releases, mitigate potential threats to the environment, ensure continued environmental and public health oversight, and to seek prosecution of the responsible entity, where applicable.

Environmental Health Education & Outreach

It should be noted that there are many vital environmental health issues affecting Somerset County residents not specifically outlined in this report. State, County and Local professionals work in partnership to address residents concerns about indoor air quality, underground storage tanks, septic systems, lead poisoning, site remediation, occupational health and a multitude of other topics not currently delegated to the Somerset County CEHA program. Regulation and education in these areas are accomplished through the comprehensive efforts public health officials, environmental commissions, planning boards, housing, construction and fire code officials, and numerous other stakeholders. By maintaining dialogue between agencies about emerging issues of concern to Somerset County residents, and supporting the collaborative efforts of the Somerset County Health Officers Association and the Governmental Public Health Partnership (GPHP), we will develop consistent, focused, County-wide efforts to address environmental health issues.

The Somerset County Department of Health encourages the development of strategic partnerships with other Local, State and Federal agencies, non-profit organizations, environmental commissions, the general public and the business community to address environmental concerns. The CEHA program will continue open dialogue with affected stakeholders regarding environmental issues and foster cooperation regarding the identification and referral of potentially regulated activities. CEHA staff will continue to participate in forums such as the GPHP's Environmental Health Taskforce. Additional training opportunities will be coordinated to ensure consistent responses from all environmental health professionals within the County, and ensuring that residents concerns are fully evaluated from both a public health and an environmental health perspective.

Additionally, SCDOH looks forward to partnering with NJDEP in 2010 on two new initiatives: pesticide control inspections and school chemical management compliance assistance evaluations. CEHA staff will ensure that commercial landscaper applications of pesticide products are done in accordance with State guidelines, enhancing our role in protection of the County's surface water supplies. For schools with laboratories, CEHA staff will provide no-cost compliance assistance visits to ensure the safe storage and management of hazardous chemicals.

Finally, providing environmental health education for both residents and members of the regulated community is a continued priority for Somerset County's CEHA program. Enforcement of the State's various regulations always occurs hand-in-hand with outreach efforts and compliance assistance initiatives. The following highlights some of the recent activities and events developed to enhance environmental health throughout the County:

- ❑ Provided an environmental compliance seminar for County schools and municipalities focused on air pollution permitting requirements, recycling, lab management & pesticide control.
- ❑ Hosted the NJ Division of Criminal Justice, Environmental Crimes Unit, to provide training for Somerset County law enforcement, health and emergency management officials with information on investigating environmental crimes.
- ❑ Obtained specialized EPA training in Shoreline Assessment & Clean-Up.
- ❑ Collaborated with the County Office of Emergency Management and drinking water utilities to update emergency notification protocols within Somerset County.
- ❑ Partnered with NJDEP in development of a new surface water quality database.
- ❑ Presented information on CEHA activities and NJDEP regulations to Somerset County fire marshals.
- ❑ Partnered with the County Planning Dept. to deliver wastewater management information to local health officials.
- ❑ Ongoing collaboration with the Somerset County Sheriff's Dept. during solid waste truck checks to ensure DMV requirements are met.
- ❑ Collaborated with the Park Commission's Environmental Education Center during their Earth Day outreach events

- ❑ Developed a training seminar for Somerset County dry cleaners.
- ❑ Provided training to local environmental health partners on medication & syringe disposal issues, water pollution control investigations, recycling & noise enforcement.
- ❑ Developed a low-cost radon testing program in collaboration with local health departments, the business community and the Somerset County Cancer Coalition. Our efforts received NJDEP recognition in 2008 & the program remains active to-date.
- ❑ Utilized GPS mapping of our inspection activity to assist NJDEP in collecting environmental data as needed.
- ❑ Partnered with the Rutgers Environmental Stewardship program to educate emerging environmental health professionals on the scope of environmental regulations and enforcement avenues in New Jersey.

For additional information regarding the CEHA program, please contact the Department at (908) 231-7155 or via e-mail at healthdept@co.somerset.nj.us.

