

SOMERSET COUNTY DEPARTMENT OF HEALTH
County Environmental Health Act Program

-ANNUAL REPORT SUMMARY-
2009 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 Borough of North Plainfield, and the Township of Bedminster, as of 10/1/2008, while public health issues within the other 19 municipalities of the County are addressed by 9 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 maintains a full-time staff of 13 professionals consisting of: Director of Public Health, Epidemiologist, Health Educator/Risk Communicator, Environmental Health Coordinator, 3 CEHA Principal Inspectors, 1 Registered Environmental Health Specialist, a Public Health Nurse, Practice Standards Coordinator, LINCS Coordinator, Office Manager and an Administrative Assistant. It must be noted that most 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 six vehicles, 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, 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. Preliminary data for 2007 showed 11 days where ground level ozone exceeded health standards at the Flemington and Rutgers University sites (based on the EPA's 8-hour standard). This information, and reports on historical trends in air quality, can be found at www.state.nj.us/dep/airmon/. As of the date of this report, information for 2008 is not yet available. NJDEP data shows that the State's overall air quality has been improving. Maximum pollutant concentrations have declined steadily and significantly since 1967. New Jersey's exceedances of EPA standards for ozone and particulates are largely a result of stricter Federal standards that went into effect in 1998.

Ground level ozone 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. Monitoring of idling vehicles and gasoline service stations supports this effort.

In 2007, inspectors conducted 108 routine NJDEP-delegated inspections of minor source permitted facilities, including those containing regulated boilers or emergency generators, paint shops, gasoline service stations, and dry cleaning facilities. This inspection level remained consistent in 2008, with 106 inspections conducted through 9/30/2008. SCDOH also responded to 88 complaints involving air quality issues in 2007 and has responded to 75 air pollution complaints through September 30, 2008.

Beyond conducting inspections and enforcement, SCDOH proactively seeks to ensure education of the regulated community and initiated a novel training workshop for the County's dry cleaners, focusing on achieving compliance with NJDEP limitations on perchloroethylene usage and encouraging the use of alternative solvents. This novel program was selected for presentation at the 2007 National Environmental Health Association's annual conference. In 2009, SCDOH will complete an inventory of dry cleaners using alternative solvents and provide this information to consumers on our webpage.

CEHA staff continued surveillance for idling diesel vehicles – a large source of particulate pollution – and issued 31 Notices of Violation to trucking companies in 2007. SCDOH works proactively with business owners to encourage the voluntary posting of “No Idling Zone” signs to educate patrons and prevent excessive idling at their properties. Several companies have since implemented Statewide posting of these signs, based on the efforts of CEHA staff in Somerset County. SCDOH has also provided a presentation on idling regulations to the Central-West Jersey Traffic Officers' Association. The air program is an important and substantial portion of our CEHA delegated inspections, representing approximately 30% of staff activities



Activities for 2009 will include continued routine compliance inspections of permitted facilities, and enforcement where indicated. Focus areas will include gasoline service stations and facilities with emergency generators. SCDOH will promptly respond to NJDEP referrals and citizen complaints of odors, dust, open burning, truck idling and other sources of particulate emissions. Routine idling enforcement in problem areas will be continued as staff availability allows. Staff will maintain certifications in Visual 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 SCDOH's jurisdiction 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 2007, 40 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 appropriate follow-up, public notification, and treatment occurs. Similar inspection levels are expected for 2008, in accordance with NJDEP's delegated inspection protocols. In 2009, SCDOH will continue to provide information to the regulated community regarding maintenance and upkeep of their water treatment and distribution systems. 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 remains compliant 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.

The regulation of private, residential wells throughout the County falls under local board of health authority. Installation and testing requirements of residential wells vary by municipality. Additionally, smaller public facilities that do not meet the PNC classification are outside the jurisdiction of SCDOH, and gaps exist in our knowledge of the water quality at these facilities. Throughout 2007 and 2008, SCDOH conducted several initiatives to promote private well water testing throughout the County and will continue to collaborate with the Somerset County Health Officer's Association in 2009 to promote the development of uniform protection for County residents throughout the 21 municipalities, and to ensure that all residents are knowledgeable about their drinking water quality.

SCDOH 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 270 PWTA analyses were reviewed in 2007 and over 140 reviewed in the first half of 2008. 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 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. In 2005, SCDOH began a new project to assist NJDEP in ambient surface water monitoring and that work continued successfully throughout 2008. 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. SCDOH has expanded its capabilities to analyze water quality in the field, giving the Department rapid evidence in support of regulatory proceedings.

Solid Waste & Recycling

The Somerset County Department of Health is committed to ensuring an environment free from litter, illegal dumping and unsafe solid waste transportation and/or disposal facilities. The solid waste program is therefore an important and significant part of our delegated CEHA activities. In 2007, field staff conducted 49 routine solid waste facility inspections, 64 recycling compliance evaluations, and performed 230 field investigations, 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. Similar levels of inspection activity are anticipated for 2008, as well as the addition of compliance evaluations at the County's 7 auto salvage/junkyard facilities, and a program to conduct interviews on behalf of NJDEP for solid waste transporters seeking A-901 exempt status.

In 2009, 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.

Field staff will continue to perform inspections to determine recycling compliance at schools, multi-unit housing facilities, convenience stores and office complexes. Over 50 site visits were conducted in 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%. Data regarding the State's plans to reinvigorate recycling can be found at: <http://www.nj.gov/dep/dshw/recycle/>



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.

SCDOH has also participated in an annual outreach effort to the business community, through the Somerset County Business Partnership's Recycling Compliance Seminar. For the last several years, we have focused on the safe disposal of universal waste, such as fluorescent bulbs, and we plan to continue multi-media outreach efforts in 2009 to improve recycling of universal wastes. Finally, in 2008, SCDOH collaborated with the NJ Association of Realtors to provide recycling information to commercial property managers. 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.

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 three 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 2007, while only 3 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 many townships have sought to adopt the Model Noise Code and pursue enforcement with local police officers and 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, and provided \$1,135 of CEHA funding in 2007 to support local health departments in retaining certified personnel.

Safe & Healthy Communities/
Hazardous Materials Team Preparedness

Somerset County residents must be protected from health and ecological risks from 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 monies are 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.

As staffing allows, the CEHA program hopes to expand in future years to participate in various elective NJDEP compliance assistance programs, such as pesticide control, right-to-know enforcement and/or the school chemical management initiative. These efforts would further minimize environmental risks within Somerset County, however existing staff are currently not fully funded by the CEHA grant, and therefore our ability to pursue elective programs is limited at this time.

It should be noted that there are many other vital environmental issues affecting Somerset County residents not specifically outlined here. The joint efforts of both SCDOH and local health department officials are crucial in addressing residents concerns about indoor air quality, underground storage tanks, septic systems, lead poisoning, site remediation, occupational health and a multitude of other environmental concerns. Regulation and education in these areas are accomplished through the comprehensive efforts of local, county and state professionals. By maintaining dialogue between agencies about emerging environmental 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, we will expand our knowledge and allow a forum for focused, County-wide action to address environmental issues.



In 2007, SCDOH developed an environmental health survey instrument to identify the major complaints encountered by our environmental and public health colleagues, and used the data to develop a comprehensive training and networking seminar, providing information on wildlife control, air pollution issues, water quality and the safe and legal disposal of syringes & household medications.



Open and Effective Government

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 issues and concerns. As one recent example, SCDOH used data from environmental surveys to develop a low-cost outreach program to encourage radon testing for all Somerset County residents. The program was collaborative with local health departments, the business community and the Somerset County Cancer Coalition. These efforts recently received NJDEP recognition. Through GPS mapping of our inspection activity, SCDOH has played an active role in collecting environmental data for use by NJDEP and other agencies as requested. In recent years, the CEHA program has developed alliances with County law enforcement personnel, to ensure an appropriate and rapid response to potential environmental crimes. We also have 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.

The CEHA program will continue open dialogue with local health departments on environmental issues and foster cooperation regarding the identification and referral of potentially regulated operations/activities. CEHA staff will continue to participate in forums such as the Governmental Public Health Partnership'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 citizen's concerns can be fully evaluated from both a public health and an environmental health perspective.

CEHA in Action

