

COUNTY ENVIRONMENTAL HEALTH ASSESSMENT AND IMPROVEMENT PLAN 2008

INTRODUCTION

The Bergen County Department of Health Services is composed of five divisions and seven offices, providing comprehensive environmental and public health services as required by regulatory mandates and in response to identified community needs. The department applies scientific information and the skills of highly trained health and environmental professionals toward achieving departmental objectives to promote health, prevent disease and protect the environment. The ability of the department to best serve the county residents is dependent upon networking with community resources and engaging community involvement.

The Environmental Program falls under the Division of Public Health Services. Included within this Program are Environmental Protection, Occupational Health, Right-to-Know, Hazardous Materials Response Team, Clean Communities, Watershed Management, GIS, and Consumer Health. The Environmental Program assumes the responsibility as the County's Environmental enforcement agency designee as per the County Environmental Health Act (CEHA). Individual programs are designed to zero in on such pervasive problems as pollution of the air and water, excessive noise, hazardous waste / emergency response, pesticide misapplication, and solid waste disposal. The Program's responsibilities extend to the provision of environmental regulatory compliance assistance provided to county government, municipalities and the business community. Examples include: Right-to Know Compliance, Underground Storage Tanks Regulatory Compliance, Regulated Medical Waste, and Asbestos Hazard Control. Proactively, the Office provides prevention services to residents as well as the business community in the form of evaluation, monitoring, education and regulatory compliance guidelines.

STAFFING

The staff of the Environmental Program is comprised of fourteen technical and two clerical personnel. The management structure within the Office includes the Coordinator, and two Supervisors. Within the management group, there is a combined 70 years of experience in the environmental field. The educational backgrounds within the Environmental Staff are varied, including Environmental Science, Aquatic Biology, Industrial Hygiene, Wildlife Biology, Geography, Geology, Chemistry, Computer Science, and Electronics.

STATEWIDE STRATEGIC ENVIRONMENTAL GOALS

1. Goal: Clean Air

The air throughout Bergen County will be healthful to breathe, and air pollutants will not damage our forests, land and water bodies.

Each person breathes approximately 3,400 gallons of air a day. Activities such as driving cars, burning fossil fuels and manufacturing chemicals contaminate the air. However, even with substantial economic expansion and population growth, the quality of the air we breathe has improved over the last decades. Indicators utilized to assess air quality in a given area include the Pollutant Standards Index, Air Toxics, and the quantity of pollutant emissions.

Air Quality Index (AQI)

The EPA's Air Quality Index (AQI) provides a uniform system for measuring pollution levels for five of six major air pollutants regulated under the Clean Air Act. The AQI is reported as a value between 0 and 500 that corresponds to a health descriptor like "good," or "unhealthy." The AQI converts daily measured pollutant concentration in a community's air to a number on a scale of 0 to 500. The most important number on the scale is 100. An AQI level in excess of 100 indicates that a pollutant is in the unhealthful range for that day for sensitive groups.

The pollutants indexed by the AQI are called "Criteria Pollutants." They are pollutants for which science-based health criteria are used to determine the allowable ambient (outdoor) air concentrations. The Clean Air Act directs EPA to regulate criteria pollutants because of their impact on human health and the environment. They are: carbon monoxide (CO); Ground-level ozone (O₃); Nitrogen dioxide (NO₂); Particulate matter (PM₁₀); and, Sulfur dioxide (SO₂). The standards or allowable concentrations for these five pollutants are known as National Ambient Air Quality Standards (NAAQS). Note: Because standards (e.g., particulate matter and ozone) are periodically revised, the AQI is modified as needed to reflect those changes.

The Bergen County Department of Health Services, through its web site (www.bergenhealth.org) maintains a link to the NJDEP Bureau of Air Monitoring site at the NJDEP web site. This link can be found on the Environmental Page of the BCHDS web site. The NJDEP Bureau of Air Monitoring maintains three monitoring stations in Bergen County, as well as one station in Passaic County, located on the Bergen County Border. These stations are located in Fort Lee, Teaneck and Hackensack (Bergen County) and in Ramapo (Passaic County). The pollutants monitored are;

Fort Lee - Carbon Monoxide; Particulates
Hackensack - Carbon Monoxide; Particulates; Sulfur Dioxide
Teaneck - Nitrogen Dioxide; Ozone
Ramapo - Ozone

This site provides real time continuous monitoring of the listed air pollutants within sections of Bergen County and the neighboring Passaic County. The intent of the Bergen County web site is to make this information more readily available to Bergen County Residents.

Activities:

- Bergen County will continue to inspect minor and B source facilities to determine compliance with the State's air pollution control regulations. Emphasis will be placed on inspecting at least 20% of the gas station universe, dry cleaners, boilers and emergency generators.
- Bergen County will continue to respond to citizen complaints received by this office.
- Bergen County will continue to conduct enforcement activities as they relate to air pollution control.
- Bergen County will develop the capabilities to continue to integrate GIS into Clean Air Activities.

2008 Narrative

During the first three quarters of 2008, the BCDHS inspected 88 gas stations, 37 dry cleaners, and 119 other B sources. Additionally, 106 complaint investigations were received.

2A. Goal: Clean and Plentiful Drinking Water

Surface and ground water will be clean sources of potable water. Every person in Bergen County will have safe drinking water. Adequate quantities of surface and ground water will be available for all uses.

Within Bergen County there are 22 public community water systems serving the same people year-round (e.g., in homes or businesses). Additionally, there are currently 10 non-transient non-community water systems serving the same people, but not year-round (e.g., schools with their own water system) and, 29 transient non-community water systems that do not consistently serve the same people (e.g. rest stops, campgrounds, gas stations). Over the past year a number of public non-community wells have shut down and the users transferred to public community water systems.

Activities:

- Bergen County will continue to inspect non-transient PNC water systems at least every two years and transient water systems every four years.
- Bergen County will continue to implement the NJDEP Zero Tolerance Policy for PNC systems found in violation.
- Bergen County will periodically review the NJDEP public water database to determine if any PNC systems have failed to sample as required and undertake enforcement to return violators to compliance.
- Bergen County will GPS any PNC systems that are not yet located.
- Bergen County will develop a database of private wells that have been found to be impacted by contamination. This database will be developed in conjunction with the NJDEP.
- Bergen County will continue to undertake activities to educate private well owners about water quality and testing.

2008 Narrative

For the first three quarters of 2008, 3 non-transient public non-community and 7 transient public non-community water systems within Bergen County have been inspected.

2B. Goal: Clean Surface Water

Surface water provides habitats for aquatic life, food (e.g., fish and shellfish), recreation opportunities (e.g., boating and swimming), resources for industrial uses, and drinking water within Bergen County. The quality of our surface water in rivers, lakes, wetlands and estuaries often depends on activities that take place within the watersheds.

Watersheds are those land areas that catch rain or snow and drain to specific marches, streams, lakes or to ground water. Bergen County is served by the Ramapo River Watershed, the Saddle River Watershed, the Pascack Creek Watershed, the Hackensack River Watershed, the Lower Passaic River Watershed, and the Lower Hudson River Watershed. These areas are designated as Principal Watersheds of New Jersey by the NJDEP. These watersheds fall within three Watershed Management Areas (WMAs). The three WMAs within Bergen County are, WMA-3, WMA-4, and WMA-5.

In accordance with the Federal Clean Water Act, the NJDEP has prepared a listing of the water quality impaired waterbodies within the State. This listing is required by section 303(d)(1)(A) of the Federal Clean Water Act and is a component of the Statewide Water Quality Management Plan. Section 303(d) of the Federal Clean Water Act requires states to identify waters that are not attaining or not expected to attain water quality standards after the implementation of technology based effluent limits. The information listed below was taken from the list of water quality impaired waterbodies, which was prepared in 1998.

Table - List of Bergen County Known Water Quality Impaired Waterbodies

Waterbody	Location	Pollutant/impact	Biological impact	Use Impairment
Ramapo River	Mahwah	fecal coliform, Total phosphorous, sodium		primary contact aquatic life support
Saddle River	Fair Lawn	Fecal coliform Total phosphorous		primary contact aquatic life support
Saddle River	Lodi	fecal coliform, DO Total phosphorous		primary contact aquatic life support
Low.Passaic River	Elmwood Pk	Fecal coliform Total phosphorous		primary contact aquatic life support
Low.Passaic River	Garfield		Hg in fish tissue	Fish consumption
Hackensack River	River Vale	fecal coliform Total phosphorous		primary contact aquatic life support
Hackensack River	New Milford	fecal coliform Total phosphorous		primary contact aquatic life support
Hackensack River	Lower Estuary	PCBs, Chlordane, dioxin in fish tissue		fish consumption

Table - Waterbodies Exhibiting Severe Biological Impairment

Waterbody	Location	Pollutant Impact	Biological Impact	Use Impairment
Saddle River			Unknown toxicity	Aquatic life support
Valentine Brook			Unknown toxicity	Aquatic life support
Hohokus Brook			Unknown toxicity	Aquatic life support
Ramsey Brook	Mahwah		Severely impaired	Aquatic life support
Saddle River	Garfield		Severely impaired	Aquatic life support
Teneckill	Closter		Severely impaired	Aquatic life support
Overpeck Creek	Englewood		Severely impaired	Aquatic life support

Table - Suspected Water Quality Impairment

Waterbody	Location	Pollutant Impact	Biological Impact	Use Impairment
Saddle River	Fair Lawn	Ammonia		Aquatic life support
Saddle River	Lodi	Ammonia		Aquatic life support
Saddle River		Ar, Be, Cd, Cr, Cu, Fe, Pb, Hg, Zn		Aquatic life support
Hohokus Brook	Ridgewood		Moderately impaired	Aquatic life support
Valentine Brook	Allendale		Moderately impaired	Aquatic life support
Saddle River	Fair Lawn		Moderately impaired	Aquatic life support
Saddle River	Rochelle Park		Moderately impaired	Aquatic life support
Diamond Brook	Fair Lawn		Moderately impaired	Aquatic life support
Hackensack River		Ar, Be, Cr, Pb, Hg, Cu, Ni		Aquatic life support, fish consumption
Hackensack River	Old Tappan		Moderately impaired	Aquatic life support
Dwarskill	Closter		Moderately impaired	Aquatic life support
Dorotockeys Run	Harrington Park		Moderately impaired	Aquatic life support
Van Saun Brook	Hackensack		Moderately impaired	Aquatic life support
Musquapsink	Westwood		Moderately impaired	Aquatic life support
Pascack Brook	Westwood/ River Vale		Moderately impaired	Aquatic life support

Activities:

- Bergen County will continue to respond to complaints received by this office pertaining to surface water pollution.
- Bergen County will continue to conduct enforcement actions for violations pertaining to water pollution, and assess penalties for violations of the Water Pollution Control Act.
- Bergen County will continue to conduct surface water monitoring in conjunction with NJDEP.
- Bergen County will continue to participate in the coordination of activities of the North East New Jersey Watershed Alliance (formerly WMA5).

2008 Narrative

During the first three quarters of 2008, the BCDHS had received 62 complaints pertaining to some form of surface water pollution. Additionally, 35 samples were collected for the water-monitoring program.

Through the WMA process, 303(d) waters are being addresses as a primary focus of the Watershed Plan for each of the three WMAs within Bergen County. Action Now projects, which are part of the WMA process, are being supported by the 319 (h) funding from the EPA and are currently being used to address impaired water bodies. The BCDHS is working as a partner with Rutgers University on 319(h) grant projects for the Tenakill Brook and the Musquapsink Brook.

3. Goal: Safe and Healthy Communities

Communities within Bergen County will be free from unacceptable human health and ecological risks due to direct exposure from hazardous substances and other potentially harmful agents. Natural resources will be managed to protect the public from floods, fires and storms.

Known Contaminated Sites of New Jersey (KCS List)

The 2008 report from the New Jersey Dept. of Environmental Protection, “Known Contaminated Sites in New Jersey,” categorizes contaminated sites in the following way; 1. Active sites with confirmed contamination; 2. Pending sites with confirmed contamination; and 3. Closed sites with remediated contamination. The Report list 1985 Category 1 sites, 126 Category 2 sites and 2455 Category 3 sites in Bergen County. Status of this site list continues to change as new sites are added. Future environmental assessment reports will begin to address the interrelationship identified from this state listing.

Included in the KCS List are Superfund Sites. This list is comprised of sites under Federal control through the US EPA. There are currently nine (9) sites within Bergen County that are on the Superfund List. The list of sites and their status can be found in the following table. The status of these sites will be addressed in future assessments.

Site Name	CERCLIS ID	Proposed Listing Date	Final Listing Date	Construction Listing Date	Deletion Listing Date
Curcio Scrap Metal, Inc.	NJD011717584	1/22/87	7/22/87	9/30/97	
Fair Lawn Well Field	NJD980654107	12/30/82	9/08/83		
Industrial Latex Corp.	NJD981178411	6/24/88	3/31/89	9/27/01	4/21/03
Lodi Municipal Wells	NJD980769301	10/15/84	8/30/90	9/27/93	12/29/98
Maywood Chemical Co.	NJD980529762	12/30/82	9/08/83		
Scientific Chemical	NJD070565403	12/30/82	9/08/83		

Processing					
Universal Oil Products (Chemical Div.)	NJD002005106	12/30/82	9/08/83		
Ventron/Velsicol	NJD980529879	9/08/83	9/21/84		
Witco Chemical Corp. (Oakland Plt)	NJD045653854	6/24/88	10/04/89	9/28/92	9/29/95

Activities:

- Assess the status of the KCSL sites.

Household Hazardous Waste

Various products commonly used by residents in and around the home, such as batteries, fertilizers, pesticides, paints, thinners, pool chemicals, and automotive supplies contain ingredients that render them hazardous. Improper disposal of these products can result in damage to human health and the environment. The Bergen County Utilities Authority (BCUA) in conjunction with the BCDHS conduct a number of household hazardous waste collection days to insure the proper disposal of these products.

Activities:

- Continue to support the BCUA in the household hazardous waste activities.
- Continue to supply information to the public regarding the proper disposal of household hazardous waste.
- Compile past years data on participation and the amount of hazardous waste collected at the events.
- Continue to promote the household hazardous waste collection days.

2008 Narrative

Eight (8) household hazardous waste days have been scheduled to be held in Bergen County during the spring, summer, and fall of 2008. These events have not been completed, but a representation of the types of materials collected from Bergen County residents can be found below

Description
Aerosols
Anti-freeze
Asbestos
Corrosive Acid ¹
Corrosive Basic ¹
Dry-cell Batteries
Fire Extinguishers
Fire Extinguishers

Flammable Liquid (bulk)
Flammable Paint
Flammable Solid
Fluorescent Lamps
Lead-acid Auto Batteries
Mercury
Non-hazardous Solid ²
Non-regulated Solid
Oxidizer Solid ³
Oxidizers Liquid ³
Peroxide
Pesticide Liquid
Pesticide Solid
Propane Cylinders (20 lb.)
Propane Cylinders (1lb.)
Waste Oil

Haz-Mat / Emergency Response

One of the core functions of the BCDHS as participants in the CEHA Program is responding to hazardous materials incidents. Haz-Mat incidents involve responding to a wide range of events including motor vehicle accident resulting in a discharge of petroleum products, an explosion at a chemical plant, illegal dumping of chemicals, and the assistance rendered to a resident with a basement full of old and potentially dangerous chemicals.

Activities:

- Bergen County will continue to respond to Haz-Mat incidents within our jurisdiction
- Enforcement activities will be conducted as needed to correct outstanding violations.
- A program of "preplanning" of industrial and commercial sites utilizing hazardous chemicals will be undertaken to increase familiarity with these sites as well as to work toward resolution of any outstanding environmental or health and safety issues.
- Equipment purchases and training will be tailored towards recognized community needs.

2008 Narrative

During the first three quarters of 2008, the BCDHS received 284 calls pertaining to emergency response activities. The BCDHS maintains 24 hour availability, 365 days per year, to respond to hazardous materials incidents.

Solid Waste Facilities / Solid Waste Complaints

Within Bergen County there are a number of different types of Solid Waste Facilities. These include operating landfills, closed landfills, solid waste transfer stations, compost facilities and a class B and C recycling facility. Most of these facilities are inspected by the BCDHS as well as the NJDEP. A listing of the rate of inspection and number of facilities can be found in the table below.

Complaints are received by the BCDHS pertaining to solid waste issues. These complaints deal with such issues as improper fill material, operating an unregistered solid waste facility, improper disposal of solid waste, improper disposal of regulated medical waste, and transporting solid waste in unregistered solid waste vehicles and/or containers.

Type of Facility	# of Facilities	Inspection Rate
Operating San. Landfill	0	Once / yr
Transfer Station	7	Once / yr
Class B Recycling	2	Once / yr
Class C Recycling	4	Once / yr
Compost – Exempt	20	Twice / yr
Leaf Transfer	14	Once / yr

Activities:

- Bergen County will carry out inspections of the solid waste facilities located within the County at the rate outlined above.
- As appropriate, Bergen County will conduct enforcement actions and assess penalties for violations of the Solid Waste Management Act.
- Bergen County will respond to complaints pertaining to solid waste violations that are received from the public or from NJDEP.
- When violations are identified, Bergen County will conduct enforcement actions and assess penalties for violations of the Solid Waste Management Act.
- Information concerning proper disposal of regulated medical waste will continue to be distributed.
- Bergen County will continue to carry out NJDEP's exempt decal registration program for self generating solid waste haulers.
- Bergen County will inspect dumpsters and trailers for proper decals.

2008 Narrative

During the first three quarters of 2008, the BCDHS conducted 25 solid waste inspections of compost facilities, operating landfills, and transfer stations within Bergen County. During this period, the BCCDHS responded to 44 complaints pertaining to solid waste issues.

The BCDHS continues to participate in the NJDEP's exempt decal registration program. During the first three quarters, the BCDHS conducted 48 decal registrations.

Pesticide Inspections and Complaints

The BCDHS has been actively involved with carrying out pesticide application inspections for the NJDEP as part of a Pilot Program. Inspections of landscapers, golf courses, schools, State unregistered Products, and restaurants are conducted throughout the year. The table below illustrates the number of inspections that are carried out.

Type of Facility	# of Inspections
Landscapers	10
Golf Courses	5
Schools	25
State Unregistered Products	40

Activities:

- Bergen County will continue to respond to complaints pertaining to pesticides.
- Bergen County will carry out inspections as outlined in the table above.
- Violations identified during inspections and complaint investigations will be referred to the NJDEP.

2008 Narrative

During the first three quarters of 2008, the BCDHS conducted 55 pesticide inspections of landscapers, schools, and food establishments. Four (4) complaints were referred back to the NJDEP, Pesticide Control Program. As per an agreement with the pesticide program, the number of inspections for State Unregistered Products was increased and the number of inspections for Landscapers was decreased.

Noise

The noise program within BCDHS involves responding to citizen complaints and supplying support for local enforcement of Noise Ordinances.

Activities:

- Bergen County will continue to respond to noise complaints, and take appropriate enforcement action when warranted.
- Bergen County will continue to support local noise control activities by providing equipment and technical support.

2008 Narrative

The noise program of the BCDHS continues to be a small program. During 2008, the BCDHS received 23 noise complaints. When noise complaints are received, they are investigated to confirm that a violation of the State Noise Regulations exists, and then every effort is made to alleviate the problem.

Residential Underground Storage Tanks

In 1995, Bergen County in conjunction with the NJDEP began a Residential Underground Storage Tank Program. The need for such a program was highlighted by the continuous streams of bad press received by the NJDEP due to homeowners either being swindled by disreputable contractors or lost in the State's bureaucracy. Through the pilot program, Bergen County provides technical oversight for the homeowner from where a release from an UST has occurred, and aids in the rapid transition to a clean closure and No Further Action Letter from the State. There are no charges to the homeowner for the services of either the BCDHS or the NJDEP within this program.

Activities:

- Bergen County will continue to carry out the Residential Underground Storage Tank Program.
- Bergen County will continue to promote the program to the residents.

2008 Narrative

The Residential Underground Storage Tank Program continues to be a success story in Bergen County. The program which was started as a pilot, helps the Bergen County Residents handle the closure of their residential heating oil tanks and reduces the time and costs involved. During the first three quarters of 2008, the BCDHS participated in 211 closures.

Regulated Underground Storage Tanks

The BCDHS is working with the NJDEP to inspect facilities utilizing underground storage tanks. These tank inspections are directed towards fostering facility compliance with the technical regulations for upgrades and operations.

Activities:

- Bergen County will conduct inspections of facilities utilizing regulated underground storage tanks.
- Initial notices of enforcement action will be issued to facilities found out of compliance with applicable regulations.
- NJDEP will be regularly updated on the results of the facility inspections and enforcement issues.

2008 Narrative

During the first three quarters of 2008, the BCDHS has conducted 132 UST inspections.