

**MONMOUTH COUNTY HEALTH DEPARTMENT
HAZARDOUS MATERIALS RESPONSE/UST UNITS
2008 ANNUAL REPORT**

Overview

The Monmouth County Health Department's Hazardous Materials Response Unit continues to provide outstanding hazardous materials and environmental response services to the citizens of Monmouth County. It is the responsibility of the hazardous materials unit to develop and maintain standardized hazardous materials (Hazmat) and CBRNE (Chemical, Biological, Radiological, Nuclear, and Explosive) emergency response capability, capacity, and competence. We maintain a core of highly trained and equipped personnel that will respond to hazmat and CBRNE emergencies and conduct investigations in coordination with the New Jersey Department of Environmental Protection (DEP), the Department of Health and Senior Services (DHSS), and the New Jersey State Police (NJSP) Special Operations Section. All emergency response activities are conducted in accordance with the Monmouth County Emergency Operations Plan, the DEP Technical Requirements for Site Remediation, applicable PEOSHA requirements, and the NJSP Hazmat Emergency Response Team Standards for Operations and Training.

The Hazardous Materials Response Unit is available to respond to any hazmat/CBRNE incident in Monmouth County on a 24 hour per day/7 day per week/365 day per year basis. Each member is equipped with a specialized emergency response vehicle containing all the detection, personal protection, and response equipment needed to handle most routine incidents in the field. The unit also maintains two heavy duty emergency response trucks capable of supporting extended operations for larger incidents. In addition, we maintain trailers capable of supporting command, logistics, decontamination, and mobile power needs at any incident.

County Environmental Health Act (CEHA)

Since 1985, the Monmouth County Health Department has entered into a written agreement with the DEP to provide environmental services under the CEHA program. As the certified CEHA agency for hazmat and CBRNE response in Monmouth County, the hazmat unit must respond to all hazmat and CBRNE emergencies referred by DEP to assess environmental health threats, make recommendations for response actions, and coordinate those response actions with local, state and federal agencies. We must also maintain specialized hazmat and CBRNE field monitoring equipment that meets the minimum NJSP standards for hazardous materials response teams. Since our unit is also considered a state asset under the agreement, we can be called to respond to emergencies outside of Monmouth County at the request of the DEP and/or the NJSP Special Operations Section. In addition, we are required to submit reports to DEP documenting all incidents responded to, remedial actions taken, and any potential

violations of state environmental laws. Incidents involving potential criminal violations are promptly referred to the appropriate law enforcement agency.

In accordance with our CEHA agreement, the hazmat unit coordinates with the Monmouth County Office of Emergency Management (OEM) and local hazmat/CBRNE response units to develop and maintain an integrated emergency preparedness system throughout the county. We currently have written agreements with the following hazmat units to provide mutual aid and equipment when requested:

- Earle Naval Weapons Station Fire Department Hazmat Unit
- Fort Monmouth Fire Department Hazmat Unit
- Howell OEM Hazmat Unit
- Middletown Fire Department Special Services Unit
- Neptune OEM Hazmat Unit
- Southard Fire Department Hazmat Unit

The Health Department hazmat unit sponsors a regular schedule of meetings throughout the year for senior members of the hazmat teams, along with representatives from the county OEM and county Fire Marshal's office. Issues discussed include: current events, available grant funding, response and equipment standardization, reporting requirements, and joint training opportunities. These meetings have become an integral part of the planning process and will continue to be so in the years ahead.

A serious issue facing the county's hazmat/CBRNE emergency response program is the impending closure of The U.S. Army Garrison at Fort Monmouth. The Garrison's closure, to be completed by September 15, 2011, will result in the dissolution of the base's fire department and hazardous materials response unit. This elite hazmat unit currently houses state-of-the-art detection and response equipment, as well as approximately 40% of the certified hazardous material technicians based in Monmouth County. The loss of this unit will leave a large gap in the County's hazmat/CBRNE competency and capacity. Present and future planning initiatives must address this anticipated shortfall.

Intrastate County Mutual Aid Agreement/Hazmat Cost Recovery Ordinance

In 2008, a statewide mutual aid network for hazmat/CBRNE services was proposed by the DEP, in cooperation with the State Office of Emergency Management, the Office of the Attorney General, and the State Office of Homeland Security and Preparedness. An Intrastate Mutual Aid Agreement was sent to all counties for approval and signature by their governing bodies. It is anticipated that the statewide agreement will create a documented system of response capability among county hazmat programs when a single or multiple simultaneous large-scale hazmat/CBRNE incident overwhelms the local jurisdiction. In addition, the agreement will promote coordination, consistency, and predictability in hazmat/CBRNE response throughout the state.

In anticipation of Monmouth County's participation in this agreement, the hazmat unit is developing an ordinance to recover costs from responsible parties for hazmat/CBRNE response expenses. Monmouth is one of a few counties that do not already have such an ordinance in place. This ordinance, once approved, will not only allow us reimbursement for our responses, but will also provide a mechanism for reimbursement to agencies from other counties when requested by Monmouth County. Our goal is to have the ordinance approved and enacted by early to mid 2009.

Domestic Preparedness

The hazmat unit continues to be involved in domestic preparedness planning for the county. The hazmat unit's Program Coordinator maintains a seat on the county's Grant Working Group, LEPC, and regularly participates in other planning meetings with county OEM and the county Fire Marshall. Based on these planning initiatives, we continue to revise our response protocols and improve our response capabilities. We also continue to coordinate countywide efforts to develop response guidelines to emergencies with other organizations including hospitals, postal facilities, municipal fire, police and EMS units. Coordination with the county OEM and Fire Marshall has resulted in an integrated network of primary and secondary departments for mutual aid including hazmat/CBRNE response and mass decontamination.

Monmouth County received a total of \$792,749.30 from the New Jersey Office of Homeland Security and Preparedness for fiscal year 2008. From this total, \$396,374.65 was allocated to the State Homeland Security Grant Program (SHGP), \$198,187.32 was allocated to the Law Enforcement Terrorism Prevention Program (LETPP), and \$198,187.32 was allocated to improvised explosive device (IED) recognition planning/training initiatives. The bulk of the SHGP funding was reserved for mass prophylaxis and medical surge initiatives. Approximately \$28,000.00 was allocated for the purchase of CBRNE air monitoring equipment for the hazmat teams. Additional funding from this source was reserved for interoperable communications initiatives.

Complaint Investigations

The hazmat unit handles a wide range of complaints each year. They vary in nature from small residential spills of household chemicals and heating oil to large-scale industrial spills, fires, illegal dumping and over the road accidents involving cargo spills or release of motor vehicle fluids. In order to provide 24/7 coverage an additional seven staff members from various environmental programs within the health department routinely respond with and train with the hazmat unit staff and provide after-hours coverage.

Through a cooperative effort with the Health Department's household hazardous waste facility the hazmat staff routinely assists homeowners in identifying a great number of unknown chemicals before they are brought for disposal. The staff also routinely

interacts with various branches of local and state government during initial or joint investigations. We are also involved with local health departments by providing them with guidance and assistance on environmental issues.

Complaint Composition Summary

Fuel Storage Tanks	24
Motor Vehicle / Boat Accidents	44
Leaking Containers / Illegal Dumping	20
Sloppy Housekeeping	18
Waterway Spills / Sheens	2
Fuel Delivery Spills / Overfills	13
Chemical Reactions / Fires	3
Transformers	12
Identify Unknown Chemicals	13
Mercury Spills	3
Suspicious Package / Powder	6
Fumes / Odors	9
Sewage Spills	1
Pesticides	2

Response highlights for 2008 include:

January 18th – The Monmouth County Prosecutors Office requested the assistance of the hazmat staff to identify several containers of powder discovered at a residence in Freehold Borough during the execution of a search warrant. The New Jersey State Police Bomb Squad also responded to the scene. All powders examined were consistent with materials used in the production of fireworks. The NJSP Bomb Squad removed all explosive materials from the scene. Hazmat staff transported the other powders to the Household Hazardous Waste Facility for proper disposal.

February 7th – Hazmat staff responded to a residence in Ocean Township for the report of a mercury spill. An antique barometer leaked elemental mercury onto the floor of the home's basement. The spill area was remediated and all remaining mercury from the barometer was recovered. Approximately 25 pounds of mercury was recovered from the spill. All mercury and mercury containing waste were transported to the Household Hazardous Waste Facility for proper disposal.

March 27th – Hazmat staff responded to Hair Systems, Inc. in Englishtown for a chemical reaction fire. Hair Systems blends oxidizers and other chemicals for use as hair care products. The fire occurred in a hopper feeding a bottling process line. Local firefighters extinguished the fire and were beginning ventilation of the building when hazmat staff arrived. Hazmat staff entered the production area and secured several fiber drums of oxidizers that were near the machine involved in the fire. As in past

incidents involving this facility, the cause of the reaction was most likely high humidity levels in the production area.

August 5th – Hazmat staff responded to the Home Depot in Freehold Twp. for the report of a chemical odor in the store. The Store was evacuated by the local fire company. The store's general manager stated that a crew worked overnight refinishing floors. They used a solvent, commonly known as Goof Off, to remove paint spills on the floors. A strong solvent odor was evident throughout the building. Numerous fans were set up for ventilation and the Building's HVAC system was employed to remove the odors. The building was ventilated for approximately three hours and the store was reopened for business.

October 21st – Hazmat staff responded to a Chase Bank branch in Howell Township at the request of the Howell Police Department. A suspicious letter was encountered by employees of the bank. The letter appeared to contain a white powder. The employees did not open the letter and evacuated the bank. Hazmat staff responded and examined the letter. Previous intelligence received by the hazmat unit indicated that the letter was similar to other letters containing a non-hazardous powder and anthrax threat that were sent to numerous Chase Bank branches across the country. Field analysis of the powder indicated a non-hazardous calcium-based material. As a precaution, a sample was sent to the NJDHSS laboratory for further analysis. Results of that analysis were negative for any biological agents. The letter and remaining powder were turned over to the FBI for further investigation.

Regulated Underground Storage Tank Enforcement Program

In January 2006, the Health Department entered into an agreement with the DEP to conduct compliance monitoring/leak detection inspections of active regulated underground storage tanks (UST) under the CEHA Cooperative Agreement (CA) executed between both agencies. Under the program, the Health Dept. is authorized to investigate, on behalf of the DEP, all regulated USTs within Monmouth County and initiate appropriate enforcement actions which include issuing NOVs, issuing delivery bans and cease use actions, and coordinating and negotiating settlement agreements with violators in consultation with the DEP. We also provide compliance assistance and distribute materials provided by DEP to owners and operators of UST facilities.

On March 26, 2008 the Monmouth County Health Department hosted an UST compliance assistance seminar for public agencies and small private facility owners. Representatives of the NJDEP's Compliance and Enforcement Bureau were on hand to give presentations on the UST regulations and answer any questions from the participants. The seminar was well received and we plan to host more of these educational programs in the future.

During 2008, the UST unit initiated 26 penalty settlement agreements in coordination with the DEP's Regional Field Office. The largest of these settlements involved a major

gasoline retailer that failed to perform release detection monitoring on its underground storage tank system. A subsequent inspection performed by the UST unit revealed gross contamination of soils and ground water at the facility, caused by a corroded hole in one of the dispenser supply lines. The facility was not allowed to dispense gasoline or receive gasoline deliveries until the site was brought back into compliance.

Summary of 2008 Regulated UST Program Activity

Facility Inspections	95
Violations Cited	215
Delivery Bans	98
Cease Use Orders	4
Facility Reinspections	63

Residential Storage Tanks

The hazmat unit continues to be heavily involved in issues concerning residential underground and above ground storage tanks. We routinely handle cases involving leaking residential heating oil tanks. A total of 22 cases involving residential tanks were handled during 2008. Technical assistance with tank removal or decommissioning is regularly provided to homeowners or potential homebuyers. Assistance is also provided for emergencies arising from spills or overfills of heating oil during delivery or above ground tank failures.

We also provide homeowners with assistance regarding the NJDEP voluntary cleanup program. The program's purpose is to oversee the cleanup of soil and/or ground water contamination at residential properties to ensure they are in accordance with NJDEP Technical Rules for Site Remediation. Homeowners enter into a Memorandum of Agreement (MOA) with the NJDEP to request Department oversight of all cleanup activities. Information on the program and most commonly asked questions including links to NJDEP are posted on the MCHD web site.

Special Assignments

On March 28, 2008 President George W. Bush visited the NovaDebt credit counseling service facility in Freehold Township. The hazmat unit participated in pre-planning and operational activities for this event, in coordination with the U.S. Secret Service. We set up and monitored multiple perimeter air monitoring stations around the NovaDebt property while the President and his support units were on site. All monitoring systems performed flawlessly and no air contaminants were detected during the President's short stay.

Contaminated Site List / Property Searches

The hazmat unit is responsible for handling all requests for review of Health Department environmental records. Access to government records by private citizens is governed under the Open Public Records Act (OPRA). Requests for information come in as part of environmental Phase 1 investigations by private consultants or as individual inquiries from potential homebuyers and concerned citizens. Most lending institutions require an environmental background search on real estate transactions to document any past or current environmental issues.

A total of 258 OPRA requests were processed through the hazmat unit in 2008. The requests seek information on specific properties regarding underground storage tanks, spills and illegal dumping, solid waste, air and water concerns as well as public health issues. In addition, a database of contaminated sites and leaking underground storage tanks is being maintained and updated with information provided to us by NJDEP. There are currently over 6,000 records of such sites in Monmouth County.

Continuing Education and Training

Continuing education and training are essential parts of our mission to provide a comprehensive emergency preparedness system throughout Monmouth County. The Health Department's hazmat unit maintains some of the most highly trained hazmat/CBRNE response personnel in the State of New Jersey. In 2008, we continued to expand our emergency response capability and competence by taking advantage of numerous federal, state, and local training opportunities.

Four of our senior members currently hold the credential of Certified Hazardous Materials Manager (CHMM). This prestigious credential is recognized throughout the country as the standard of excellence in the hazardous materials management profession. Our CHMMs have a national network of technical and educational information resources at their disposal. These networking opportunities allow them to increase their effectiveness and scope as hazardous materials managers and emergency responders.

In addition, several members of our staff hold instructor certifications for various hazmat/CBRNE training courses. All hazmat unit members must also maintain current certificates in fire fighting and/or industrial fire brigade, first responder and/or EMT, CPR/first aid and defibrillator (AED) certifications.

Training opportunities can take many forms, from informal "in-house" sessions to major full-scale exercises. Listed below are some of the highlights of our training program for 2008:

- Public Safety WMD Sampling Techniques & Guidelines - NCBRT/LSU

- Rae Systems Service Technician Certification – Rae Systems
- Portable FT-IR Instrument Operation and Application – Smiths Detection
- Sub 5 Odor Field Enforcement - NJDEP
- Level A PPE/SCBA Certification - MCHD
- Chlorine Response Drill - NJ American Water Co.
- Threat & Risk Assessment Course – Texas A&M University
- Shoreline Clean Up Assessment Team – USEPA/NJDEP
- Introduction to CAMEO, ALOHA, MARPLOT Suite – USEPA
- Regulated Underground Storage Tank Inspector Certification – NJDEP
- Certified Hazardous Materials Manager Recertification – IHMM
- CPR/AED Recertification – American Heart Association