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 electric 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.

This issue is currently being discussed as a part of the Fort Monmouth Economic Revitalization Planning Authority’s Emergency Services Advisory Committee. Our Hazmat Coordinator is providing guidance to the Committee regarding options to enhance the area’s hazmat response capacity and capability in the wake of the Fort’s impending closure.

**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. The Monmouth County Board of Chosen Freeholders approved and signed the agreement in 2009. The statewide agreement creates 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 promotes coordination, consistency, and predictability in hazmat/CBRNE response throughout the state.
As a part of our participation in this agreement, the hazmat unit has implemented an ordinance to recover costs from responsible parties for hazmat/CBRNE response expenses. This ordinance was approved by the Board of Health by resolution on May 19, 2009. It not only allows us to receive reimbursement for our responses, but also provides a mechanism for reimbursement to agencies from other counties when responding at the request of Monmouth County.

**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.

Funding from 2007 and 2008 Office of Homeland Security and Preparedness (OSHP) grants was allocated for the purchase of CBRNE air monitoring equipment for the hazmat teams. A total of $32,055.20 in air monitoring equipment was distributed to the non-military subcontracting hazmat teams in September 2009.

**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 17
Motor Vehicle / Boat Accidents 30
Leaking Containers / Illegal Dumping 15
Sloppy Housekeeping 15
Waterway Spills / Sheens 17
Fuel Delivery Spills / Overfills 6
Chemical Reactions / Fires 6
Transformers 4
Identify Unknown Chemicals 12
Mercury Spills 5
Suspicious Package / Powder 5
Fumes / Odors 12
Pesticides 1

Response highlights for 2009 include:

March 9th – The hazmat unit responded to Allaire Airport for the report of an airplane crash resulting in a fuel leak. A twin engine turbo prop airplane crash landed causing a release of Jet-A fuel. Approximately 400 gallons of fuel was reported to be on board when the plane crashed. Approximately 150 gallons was recovered into 55-gallon drums. The remaining fuel leaked into the soil due to inaccessible holes in the wings. The airplane’s owner was directed to hire an environmental contractor to complete the remediation.

April 1st - The Hazmat unit responded to Edison Hall on the campus of Monmouth University. A strange strong odor in the chem/bio lab had been reported by the campus security guard on duty. The Fort Monmouth Hazmat team made an initial level A entry with multi gas detectors. No chemicals or gases were detected. Our hazmat unit made a second entry and inspected each lab to confirm that no chemicals or gases were released. After confirming that no hazard existed, the heads of the chemical and biology labs accompanied MCHD, Ft Monmouth and West Long Branch officials to examine the labs to ensure that nothing was missing or out of place. Both department heads stated that nothing appeared to be out of place. The building was declared safe for occupancy at 0250hrs.

May 15th - The hazmat unit responded to Jersey Shore University Medical Center to assist Neptune Township O.E.M with a release of 1150 gallons of 32% Urea. The release was caused due to the shearing of a pipe on the Urea holding tank. Urea is used by the hospital’s cogeneration plant. All the Urea which left the building was collected for disposal by Freehold Cartage Inc. The Urea which remained inside the building was cleaned up by the responsible party with oversight by MCHD hazmat staff. No Urea impacted any waterways or soil. No injuries or disruption to the hospital occurred during this incident.
**July 28th** - The Tinton Falls police department requested assistance dealing with a package which had been returned to a business in town from Norway. The owner of the business stated that the envelope was not one the business would use and that the return addressee’s name was spelled wrong. The owner further stated that when he opened the package he noticed a white powder. The letter was inspected by the unit and it was observed to contain a packet of an unknown white substance. Using an Ahura Defender laser chemical identifier the substance in the packet was identified as 81% cocaine. The Tinton Falls police collected the material as evidence and later informed the unit that further investigation by the Tinton Falls police department found heroin packaged inside the packing material.

**October 26th** - The hazmat unit responded to a request for assistance in Freehold Twp. for a report of multiple victims receiving medical treatment after an exposure to acid vapors. The staff performed an investigation of the office. An overheated lead acid battery was found to be the source of the acid vapors. Once the battery was removed, ventilation of the building was conducted by the East Freehold Fire Company. Ventilation was completed and follow up readings were taken by MCHD. All readings were normal and the building was re-opened for business.

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**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.

During 2009, the DEP enacted changes to the UST inspection program which added considerable workload to the CEHA UST inspection program. Specifically, Clean Air Act regulations for stage 2 vapor recovery equipment were added to the UST program responsibilities. These regulations were previously enforced by our air pollution control unit. Because of this increased workload, the DEP dropped the total number of UST inspections required from 95 to 80 in 2009.

In addition, due to an administrative court challenge at the state level, in February 2009 the DEP instructed all CEHA UST programs to temporarily refrain from issuing delivery bans and cease use orders until the challenge could be resolved. As of December 2009 the DEP established new procedures for the issuance of delivery bans and cease use orders by the CEHA UST programs. As our 2010 inspection cycle begins we will once again have the authorization to utilize these very effective enforcement tools.

During 2009, the UST unit initiated 19 penalty actions in coordination with the DEP’s Regional Field Office.
Summary of 2009 Regulated UST Program Activity

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<th>Count</th>
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<td>Facility Inspections</td>
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<tr>
<td>Field NOVs Issued</td>
<td>72</td>
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<tr>
<td>Delivery Bans</td>
<td>0</td>
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<tr>
<td>Cease Use Orders</td>
<td>0</td>
</tr>
<tr>
<td>Facility Reinspections</td>
<td>57</td>
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</tbody>
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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. 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 July 16, 2009 President Barack H. Obama visited the PNC Bank Arts Center facility in Holmdel Township. The hazmat unit participated in pre-planning and operational activities for this event, in coordination with the U.S. Secret Service and New Jersey State Police Hazardous Materials Response Unit. Our unit assisted in providing perimeter air monitoring and decontamination capabilities for the President and his support units. All monitoring systems performed flawlessly and no air contaminants were detected during the President’s visit.

In addition, the hazmat/UST staff provided support for the Health Department’s H1N1 influenza vaccination clinics and Strategic National Stockpile Personal Protective Equipment distribution program. The staff provided logistics support for the influenza clinics and participated in the receipt of SNS supplies from the state Health Department and the distribution of those supplies to five hospitals in Monmouth County.
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 203 OPRA requests were processed through the hazmat unit in 2009. 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 2009, 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 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 2009:

- Advanced Chemical/Biological Integrated Response Course – Dugway Proving Ground, Utah
- NJDEP CEHA Enforcement Workshop – NJDEP
- OSHA 2225: Respiratory Protection – Atlantic OSHA Training Center
• Odor Field Enforcement - NJDEP
• Level A PPE/SCBA Certification - MCHD
• Hazmat IQ Investigative Techniques for Response – Middlesex Fire Academy
• Responding to Transportation Emergencies – Middlesex Fire Academy
• Anhydrous Ammonia Emergency Response Drill – Nestle Corporation
• Chlorine Emergency Response Drill - NJ American Water Co.
• Enhanced Threat & Risk Assessment Course – Texas A&M University
• HazCat Chemical Identification Workshop – Haztech Systems Inc.
• Designing Effective Safety & Health Management Systems – UMDNJ
• Confined Space Awareness – Monmouth County Fire Academy
• Hazmat Branch Officer Certification Course – E.I. DuPont Corporation