

# Mitigating and responding to a hazmat incident essay example

[Business](#), [Management](#)



Bordentown is a city in Burlington County, New Jersey, US. The city, located at the convergence of Blacks Creek, Crosswicks Creek and Delaware River had a population of 3, 924 as of 2010 (city-data. com, 2012). New Jersey has a climate that is relatively comparable to most other states. Other than experiencing higher levels of precipitation; Bordentown's all other significant statistical climate determiners are relatively similar to other states. The town has four main highways, water, rail and bus services. This transport system serves long distance trips between the southern and Northern areas of the state. Several aspects of Bordentown's geographical location, as well as its social-economic infrastructure, portend diverse natural and man-made disasters. This paper presents the disaster threats, plans and exercises to mitigate and recover from an emergency incident within the Bordentown community.

## **Threats, mitigation measures and emergency responses in Bordentown**

There are several natural and manmade threats that can cause catastrophic disasters to the Bordentown community. Some of the natural threats include earthquakes, droughts, extreme heat/winds/colds/ice, flooding, landslides, wildfires and hurricanes. Man-made disasters such as terror attacks, building collapses among others can strike critical facilities such as municipal buildings, police and fire stations, schools, hospitals, emergency operation centers, transportation systems oil facilities, communication networks, civil infrastructure among many others.

Natural disasters are of considerable concern to the Bordentown community. The threat of terror attacks is relatively small as evidenced by the fact that no arrests were made in 2011 in relation to terror threats. Bordentown lies in a relatively coastal area (close to the Atlantic Ocean) and is thus susceptible to tropical storms and hurricanes. Being lowland, Bordentown harbors swamps, lakes, marshes, streams, rivers and bogs. In addition, the community also faces the threat of tornadoes and snow storms. Bordentown has a 20% higher risk of these latter two than the rest of the state. The town is also located near the Federal Reserve of the Pinelands that encompasses 1.1 million acres of forest. As such, forest fires are an area of serious concern especially with military operations. In response to a disaster, the principal concern would be on how to deal with the elderly (approx. 5% of the population) and minors under the age of 18 (Approx. 25% of the population).

In case a catastrophic disaster strikes Bordentown community, there are several facilities that can bear the blunt of the resultant humanitarian concerns. The police, fire, hospital and local government facilities are all located within a 2 mile area. There are approximately 14 fire fighters, 79 police officers and 15 local government officials within those facilities. Joint planning is necessary with the surrounding communities to help safeguard civilians and the area if an attack was to happen. Bordentown's administration could enter in collaborative agreements with neighboring counties and towns in which it can request for assistance to respond to disasters (Thompson, 2004). It is also imperative that the community's

administration establishes and spreads these facilities to the outskirts of the city. This will reduce chances of a terror or natural disaster affecting all the facilities in one blow. When different amenities are spread across the city, it means that if a disaster strikes any part of the city, at least one or more services (police, fire fighters, paramedics etc) will be at hand to respond.

One of the most effective, Pro-active mitigation strategies against disasters is enhancement and technical compliance to building regulations. To the best of their ability, engineers should design buildings to withstand earthquakes, winds among other threats. Thompson (2004) asserts that contractors should also use quality materials in buildings, bridges, water and sanitation systems among other infrastructural works. Quality infrastructure can manage to withstand some natural calamities to a significant extent resulting in lower casualty levels and reduced economic losses (Thompson, 2004).

The Bordentown community could also join a nationwide organization that respond to emergencies such as Citizen Corps. Such an organization presents opportunities for individuals to volunteer in helping their communities prepare for emergency situations. Organizations on Disaster preparedness unite citizen volunteers, local leaders, first respondent organizations such as police, paramedics, and fire departments. This is an effective way to handle emergencies as it incorporates different ideas and actively involves the general public. Most importantly, the people get to learn on how to respond to small emergencies such as accidental fires at home. Some of the most catastrophic disasters start small (say a small kitchen fire)

and then escalate. The Bordentown council should incorporate the members of public in decision making, create a team to manage volunteer resources, leverage mutually supportive activities and draw budgets and plans on how to respond to emergencies. Equipping the general populace of Bordentown with information on how to respond to emergencies is an effective, proactive measure in creating a safer and stronger community.

Under the Citizen Corps initiative, the Bordentown community can enroll members in programs such as Community Emergency Response Team (CERT), Medical Reserve Corps and Volunteers in Police Service (VIPS), among others. These programs train personnel who later train the public in various issues requiring emergency response.

In addition, Bordentown's administration can sensitize and educate the public on emergency response through educational literature such as brochures and books. Some of the literature the administration can use include *Are You Ready? A Guide to Citizen Preparedness*- a brochure produced by Department of Homeland Security (DHS) and *The Citizens' Preparedness Guidebook*-produced by the National Crime Prevention Council (NCPC). The local administration should inform the public of the role of disaster response agencies such as the Federal Emergency Management Agency (FEMA) (FEMA, 2007).

The community can also send its members to areas hit by disasters where they become actively engaged in emergency response. The lessons learnt in other areas should be incorporated in the community's plans on disaster

response. Most importantly, the practical skills acquired by Bordentown members in disaster scenes could come in handy in case similar disasters befall their land.

The national preparedness cycle is a comprehensive plan that the Bordentown community can draw from in order to enhance its capacity to handle disasters. The cycle comprises of five steps namely; planning, organizing or equipping, training, exercising and evaluating for areas of improvement (Local Emergency Planning Committee-LEPC, 2006). Planning calls for organizing for technical assistance in terms of the equipment (evacuation choppers, firefighting equipment, floaters among others) and adept personnel. Planning for the needs of special groups and creating a task force for emergency readiness. Most importantly, effective planning calls for drawing up guidelines on how to respond to different disasters. For instance, there should be an action plan specified for floods, another one for forest fires, and so on. Organizing calls for allocating and controlling resources and needs. Training involves increasing the competency level of the emergency response personnel. Exercising entails regular drills to perfect activities normally executed during emergency response operations. It is through the exercising that the team identifies flaws for instance in timing and thereafter seeks ways to improve.

In response to disasters, the quest to save lives should override the need to salvage property. The first and most critical step in responding to an emergency situation is the establishment of an effective communication channel. This could involve giving the public a toll-free hotline telephone

number. Personnel involved in emergency exercises should prioritize protecting people who are unaffected by a continuing catastrophe. For instance, in case of a flood, people at risk of the floods should be evacuated to higher grounds. This serves to deter high levels of civilian casualties. This operation should run concurrently with an operation to rescue survivors in areas already struck by the calamity. To prevent exacerbating a catastrophe such as floods it is critical that the relevant authorities cut off power. This serves to prevent the outbreak of other calamities such as fires. When all people have been rescued, the emergency response team inclusive of medical personnel should respond to injuries. It is critical that the team organizes for medical supplies such as disinfectants to prevent infections from spreading among the survivors. It is also imperative that the emergency team organizes for effective sanitary system. They should ensure that they have clean and safe water for use by the survivors.

## **Conclusion**

Located in New Jersey, Bordentown has a climate that is relatively similar to most of the United States. However, the town's geographical location at a low land, near the Federal Forest Reserve exposes the town to several man-made and natural disasters. The town administration needs to improve its preparedness to respond to emergency situations. First, the police, fire, hospital and the local administration are within the same area. The town's administration should establish other similar emergency response facilities further from each other. It should also collaborate with neighboring towns to boost its capacity to respond to emergencies. It is also critical that the

town's residents construct technically sound infrastructure. Additionally, Bordentown can enhance its capacity to respond to emergencies by establishing its local Citizen Corps. Educating the public through books could also increase the response to emergencies while practical skills gained by the community's members during past emergency operations could result in minimal civilian casualties in case a disaster strikes. Moreover, adhering to national policies on emergency response and a well planned response strategy all conjure up to increase Bordentown's efficacy in handling emergency situations.

## References

Bordentown, New Jersey (NJ 08505) profile: population, maps, real estate, averages, homes, statistics, relocation, travel, jobs, hospitals, schools, crime, moving, houses, news, sex offenders. (n. d.). Stats about all US cities - real estate, relocation info, crime, house prices, cost of living, races, home value estimator, recent sales, income, photos, schools, maps, weather, neighborhoods, and more. Retrieved November 10, 2012, from <http://www.city-data.com/city/Bordentown-New-Jersey.html#ixzz29LazWAEr>

Citizens Corps (2002) A Guide for Local Officials. Citizen Corps. Retrieved 10 November 2012 from: <https://www.citizencorps.gov/pdf/council.pdf>

Federal Emergency Management Agency-FEMA (2007) The National Preparedness Directorate an Overview. Retrieved 10 November 2012 from: [http://www.fema.gov/pdf/about/divisions/npd/npd\\_brief.pdf](http://www.fema.gov/pdf/about/divisions/npd/npd_brief.pdf)

Local Emergency Planning Committee (LEPC) (2006) A Primer for Local Planning for Hazardous Materials. State of Texas Governors Division of

<https://assignbuster.com/mitigating-and-responding-to-a-hazmat-incident-essay-example/>



Emergency Management for the State Emergency Response Commission.

Retrieved 10 November 2012 from: [ftp://ftp.txdps.state.tx.](ftp://ftp.txdps.state.tx.us/dem/lepc/lepc_handbook_texas_07262006.pdf)

[us/dem/lepc/lepc\\_handbook\\_texas\\_07262006.pdf](ftp://ftp.txdps.state.tx.us/dem/lepc/lepc_handbook_texas_07262006.pdf)

Thompson, T. (2004). Emergency response. Farmington Hills, MI: Lucent Books.