

# Appendix A

## Town of Cortlandt Hazard Analysis Report

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# Town of Cortlandt



## *Hazard Analysis Report*



Westchester County Department of Emergency Service  
Office of Emergency Management  
January 2004

## Background

The Town of Cortlandt, New York is located in the northwestern corner of Westchester County. The Town is bounded on the west by the Hudson River, the north by Putnam County, the east by the Town of Yorktown and on the south by the Towns of New Castle and Ossining. Cortlandt includes two incorporated villages, Croton-on-Hudson and Buchanan and several hamlets including Montrose, Crugers and Verplanck. The Hudson River, the New York City Watershed Lands, numerous wooded hills and steep slopes, wetland areas and streams define the rural character of the Town.

With a total area of approximately 40 square miles and a 2000 population of about 38,467 persons, the Town of Cortlandt composition in relation to the County remained constant from 1990 to 1998 with about 7.8 percent of the County's total area and 3.2 percent of its population. Although much less densely populated than the County as a whole, Cortlandt's population density is slightly higher than the average for the North County communities. Of the 40 square miles, the Village of Buchanan occupies 1.4 square miles and the Village of Croton-on-Hudson 4.98 square miles.

The Unincorporated Town has a total area of 34.5 square miles with an estimated 2000 population of 28,672. Over 94% of the Town's land is zoned for residential or open space while only approximately 6% is zoned commercial or industrial. 13% of the Town's land area, approximately 2,100 acres, is public parkland. Another approximately 550 acres of land are owned by various environmental organizations such as Brinton Brook Sanctuary, Teatown Reservation, McGregor Preserve and the lands of the New York City Watershed. In order to help preserve this residential character and balance the protection of the environment with economic development the Town Board created a professionally staffed Planning Department in 1974. In addition the Town has undertaken various studies and plans including the North Cortlandt Study of 1981, the Central and Southern Cortlandt Study of 1987 and the Comprehensive Master Plan of 1991. Currently, the Master Plan Update is a continuation of this long range, comprehensive planning effort.

On January 14, 2004, the Town of Cortlandt conducted a hazard analysis using the automated program, *HAZNY* (Hazards New York). *HAZNY* was developed by the American Red Cross and the New York State Emergency Management Office. The results of this hazard analysis are presented in this report.

*HAZNY* is an automated interactive spreadsheet that asks specific questions on potential hazards in a community and records and evaluates the responses to these questions. *HAZNY* also includes historical and expert data on selected hazards. *HAZNY* is designed specifically for groups, rather than individual use. The Town of Cortlandt assembled a group of local officials to consider and discuss the questions and issues raised by the *HAZNY* program. Representatives from numerous local agencies (attendance sheet is attached) facilitated the meeting and recorded the results.

## The Results

The Group analyzed hazards potentially affecting the Town of Cortlandt. HAZNY rated each hazard based on the Group's assessment and assigned a numerical value.

These values are categorized as follows:

**321 to 400 HIGH HAZARDS**

**241 to 320 MODERATELY HIGH HAZARDS**

**161 to 240 MODERATELY LOW HAZARDS**

**44 to 160 LOW HAZARDS**

**The Group rated the 29 hazards as follows:**

<i>Hazard Rating</i>	
<i>FIRE</i>	322
<i>HA ZMAT (IN TRANSIT)</i>	300
<i>TRANS ACCIDENT</i>	298
<i>HA ZMAT (FIXED SITE)</i>	296
<i>UTILITY FAILURE</i>	284
<i>FLOOD</i>	280
<i>OIL SPILL</i>	257
<i>EXPLOSION (DETONATION)</i>	252
<i>SEVERE STORMS</i>	251
<i>WATER SUPPLY CONTAMINATION</i>	249
<i>STRUCTURAL COLLAPSE</i>	246
<i>DAM FAILURE</i>	245
<i>EXPLOSION</i>	245
<i>TERRORISM</i>	244
<i>WINTER STORM (SEVERE)</i>	238
<i>TORNADO</i>	232
<i>EXTREME TEMPS</i>	231
<i>ICE STORM</i>	222
<i>EARTHQUAKE</i>	202
<i>RADIOLOGICAL (FIXED SITE)</i>	197
<i>AIR CONTAMINATION</i>	196
<i>DROUGHT</i>	180
<i>RADIOLOGICAL (IN TRANSIT)</i>	177
<i>LANDSLIDE</i>	172
<i>CIVIL UNREST</i>	166
<i>EPIDEMIC</i>	165
<i>HURRICANE</i>	142
<i>WILDFIRE</i>	132

**Hazard(s) rated as high: FIRE**

**FIRE:** 322, High Hazard

**Potential Impact:** Throughout a Large Region

**Cascade Effects:** Some Potential

**Frequency:** A Frequent Event

**Onset:** No Warning

**Hazard Duration:** One Day

**Recovery Time:** One to Two Days

**Impact:**

- Serious Injury or Death is Likely, but not in Large Numbers
- Severe Damage to Private Property
- Severe Structural Damage to Public Facilities

It is recommended that the Town of Cortlandt become aggressive with its fire and building inspections throughout the commercial and business districts. All multiple dwellings should receive yearly fire inspections and places of public assembly.

**Hazard(s) rated as moderately high: HAZMAT (IN TRANSIT), TRANS ACCIDENT, HAZMAT (FIXED SITE), UTILITY FAILURE, FLOOD, OIL SPILL, EXPLOSION (DETONATION), SEVERE STORMS, WATER SUPPLY CONTAMINATION, STRUCTURAL COLLAPSE, DAM FAILURE, EXPLOSION, TERRORISM**

**HAZMAT (IN TRANSIT):** 300, Moderately High Hazard

**Potential Impact:** Throughout a Large Region

**Cascade Effects:** Highly Likely

**Frequency:** A Frequent Event

**Onset:** No Warning

**Hazard Duration:** One Day

**Recovery Time:** More Than Two Weeks

**Impact:**

- Serious Injury or Death is Likely, but not in Large Numbers
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

The group noted that the Algonquin natural gas pipeline runs through the district. All emergency response personnel should be trained at a minimum to the Haz-Mat Awareness level.

**TRANS ACCIDENT:** 298, Moderately High Hazard

**Potential Impact:** Throughout a Large Region  
**Cascade Effects:** Highly Likely  
**Frequency:** A Frequent Event  
**Onset:** No Warning  
**Hazard Duration:** Less Than One Day  
**Recovery Time:** One to Two Days  
**Impact:**

- Serious Injury or Death to Large Numbers
- Moderate Damage to Private Property
- Little or No Structural Damage to Public Facilities

The group noted that Metro-North (Hudson Line) runs through the district. **HAZMAT (FIXED SITE):** 296, Moderately High Hazard

**Potential Impact:** Several Locations  
**Cascade Effects:** Highly Likely  
**Frequency:** A Frequent Event  
**Onset:** No Warning  
**Hazard Duration:** One Day  
**Recovery Time:** More Than Two Weeks  
**Impact:**

- Serious Injury or Death to Large Numbers
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

The group noted that Englehart and Paraco have facilities in the jurisdiction and that there are numerous hardware stores, gas stations and dry cleaners in the area as well. All emergency response personnel should be trained at a minimum to the Haz-Mat Awareness level. The Fire Departments should conduct inspections of all sites with known hazardous material hazards and maintain updated inventories of all identified sites throughout the Town.

**UTILITY FAILURE:** 284, Moderately High Hazard

<b><u>Potential Impact:</u></b>	Throughout a Large Region
<b><u>Cascade Effects:</u></b>	Some Potential
<b><u>Frequency:</u></b>	A Frequent Event
<b><u>Onset:</u></b>	No Warning
<b><u>Hazard Duration:</u></b>	Two to Three Days
<b><u>Recovery Time:</u></b>	Less Than One Day
<b><u>Impact:</u></b>	

- Serious Injury or Death Unlikely
- Moderate Damage to Private Property
- Moderate Structural Damage to Public Facilities

The Town should conduct an assessment on how an extended utility failure would affect daily operations. The emergency services should investigate how they would transmit alarms and maintain communications during a power failure. A list of Town residents who rely on electrical power for life support equipment should be maintained by public safety personnel. A protocol should be developed that sends emergency responders to the homes of residents on this list to check on their welfare during power failures.

**FLOOD:** 280, Moderately High Hazard

<b><u>Potential Impact:</u></b>	<b>Throughout a Large Region</b>
<b><u>Cascade Effects:</u></b>	<b>Some Potential</b>
<b><u>Frequency:</u></b>	<b>A Frequent Event</b>
<b><u>Onset:</u></b>	<b>Several Hours Warning Hazard</b>
<b><u>Duration:</u></b>	<b>One Day</b>
<b><u>Recovery Time:</u></b>	<b>More than Two Weeks Impact:</b>

- Serious Injury or Death Unlikely
- Moderate Damage to Private Property
- Moderate Structural Damage to Public Facilities

The group noted that there are several areas throughout the Town (specifically the Croton train station) that are prone to flooding during periods of very heavy rainfall and noted the significant impact of Floyd. Storm drain improvement projects may need to be considered as a means of mitigating damage caused by flooding.

**OIL SPILL: 257, Moderately High Hazard**

**Potential Impact: Throughout a Large Region**  
**Cascade Effects: Some Potential**  
**Frequency: A Regular Event**  
**Onset: No Warning**  
**Hazard Duration: One Day**  
**Recovery Time: More Than Two Weeks**  
**Impact:**

- Serious Injury or Death Unlikely
- Moderate Damage to Private Property
- Little or No Structural Damage to Public Facilities

A supply of absorbent pads and booms should be readily available in the Town to contain large spills as best as possible while awaiting additional private, County and State resources.

**EXPLOSION (DETONATION): 252, Moderately High Hazard**

**Potential Impact: Throughout a Large Region**  
**Cascade Effects: Highly Likely**  
**Frequency: A Rare Event**  
**Onset: No Warning Hazard**  
**Duration: Less Than One Day**  
**Recovery Time: More Than Two Weeks**  
**Impact:**

- Serious Injury or Death to Large Numbers
- Severe Damage to Private Property
- Severe Structural Damage to Public Facilities

**SEVERE STORMS: 251, Moderately High Hazard**

**Potential Impact: Throughout a Large Region**  
**Cascade Effects: Some Potential**  
**Frequency: A Frequent Event**  
**Onset: Several Hours Warning Hazard**  
**Duration: Less Than One Day**  
**Recovery Time: Three Days to One Week**  
**Impact:**

- Serious Injury or Death Unlikely
- Moderate Damage to Private Property
- Little or No Structural Damage to Public Facilities

**WATER SUPPLY CONTAMINATION: 249, Moderately High Hazard**

<b><u>Potential Impact:</u></b>	Several Locations
<b><u>Cascade Effects:</u></b>	Some Potential
<b><u>Frequency:</u></b>	An Infrequent Event
<b><u>Onset:</u></b>	No Warning
<b><u>Hazard Duration:</u></b>	Four days to One Week
<b><u>Recovery Time:</u></b>	One to Two Weeks
<b><u>Impact:</u></b>	

- Serious Injury or Death Unlikely
- Severe Damage to Private Property
- Severe Structural Damage to Public Facilities

**STRUCTURAL COLLAPSE: 246, Moderately High Hazard**

<b><u>Potential Impact:</u></b>	Throughout a Large Region
<b><u>Cascade Effects:</u></b>	Some Potential
<b><u>Frequency:</u></b>	A Rare Event
<b><u>Onset:</u></b>	No Warning
<b><u>Hazard Duration:</u></b>	Less Than One Day
<b><u>Recovery Time:</u></b>	More than Two Weeks
<b><u>Impact:</u></b>	

- Serious Injury or Death to Large Numbers
- Severe Damage to Private Property
- Severe Structural Damage to Public Facilities

Inventory lists of heavy equipment owned by the Town, Villages and private local contractors should be maintained. The Westchester County Office of Emergency Management maintains this type of inventory as a resource for local communities.

**DAM FAILURE: 245, Moderately High Hazard**

<b><u>Potential Impact:</u></b>	Several Locations
<b><u>Cascade Effects:</u></b>	Highly Likely
<b><u>Frequency:</u></b>	A Rare Event
<b><u>Onset:</u></b>	Several Hours Warning
<b><u>Hazard Duration:</u></b>	Four days to One Week
<b><u>Recovery Time:</u></b>	More Than Two Weeks
<b><u>Impact:</u></b>	

- Serious Injury or Death to Extremely Large Numbers
- Severe Damage to Private Property
- Severe Structural Damage to Public Facilities

The New Croton Reservoir Dam and the Cortlandt Lake Dam are both designated as High Downstream Hazard dams by New York State. Responsible authorities should maintain an inspection program of all dams within the Town.

**EXPLOSION (BOMB THREATS): 245, Moderately High Hazard**

<b><u>Potential Impact:</u></b>	Throughout a Large Region
<b><u>Cascade Effects:</u></b>	Highly Unlikely
<b><u>Frequency:</u></b>	A Frequent Event
<b><u>Onset:</u></b>	No Warning
<b><u>Hazard Duration:</u></b>	Less Than One Day
<b><u>Recovery Time:</u></b>	Less Than One Day
<b><u>Impact:</u></b>	
	<ul style="list-style-type: none"><li>• Serious Injury or Death Unlikely</li><li>• Little or No Damage to Private Property</li><li>• Little or No Structural Damage to Public Facilities</li></ul>

**TERRORISM: 244, Moderately High Hazard**

<b><u>Potential Impact:</u></b>	Throughout a Large Region
<b><u>Cascade Effects:</u></b>	Highly Likely
<b><u>Frequency:</u></b>	A Rare Event
<b><u>Onset:</u></b>	No Warning
<b><u>Hazard Duration:</u></b>	One Day
<b><u>Recovery Time:</u></b>	Three Days to One Week
<b><u>Impact:</u></b>	
	<ul style="list-style-type: none"><li>• Serious Injury or Death to Large Numbers</li><li>• Severe Damage to Private Property</li><li>• Severe Structural Damage to Public Facilities</li></ul>

The group noted that there are several potential targets in or near the Town including the Algonquin gas line, the Metro-North train station and the dams.

**Hazard(s) rated as moderately low: WINTER STORM (SEVERE), TORNADO, EXTREME TEMPS, ICE STORM, EARTHQUAKE, RADIOLOGICAL (FIXED SITE), AIR CONTAMINATION, DROUGHT, RADIOLOGICAL (IN TRANSIT), LANDSLIDE, CIVIL UNREST, and EPIDEMIC**

**WINTER STORM (SEVERE): 238, Moderately Low Hazard**

<b><u>Potential Impact:</u></b>	Throughout a Large Region
<b><u>Cascade Effects:</u></b>	Some Potential
<b><u>Frequency:</u></b>	A Frequent Event
<b><u>Onset:</u></b>	Several Days Warning
<b><u>Hazard Duration:</u></b>	One Day
<b><u>Recovery Time:</u></b>	Three Days to One Week
<b><u>Impact:</u></b>	
	<ul style="list-style-type: none"><li>• Serious Injury or Death Unlikely</li><li>• Moderate Damage to Private Property</li><li>• Moderate Structural Damage to Public Facilities</li></ul>

**TORNADO:** 232, Moderately Low Hazard

<b><u>Potential Impact:</u></b>	Throughout a Large Region
<b><u>Cascade Effects:</u></b>	Some Potential
<b><u>Frequency:</u></b>	A Regular Event
<b><u>Onset:</u></b>	Several Hours Warning
<b><u>Hazard Duration:</u></b>	Less Than One Day
<b><u>Recovery Time:</u></b>	Three Days to One Week
<b><u>Impact:</u></b>	

- Serious Injury or Death is Likely, but not in Large Numbers
- Moderate Damage to Private Property
- Moderate Structural Damage to Public Facilities

The group noted that a tornado touched down in Continental Village approximately four (4) years ago.

**EXTREME TEMPS:** 231, Moderately Low Hazard

<b><u>Potential Impact:</u></b>	Throughout a Large Region
<b><u>Cascade Effects:</u></b>	Some Potential
<b><u>Frequency:</u></b>	A Regular Event
<b><u>Onset:</u></b>	Several Days Warning
<b><u>Hazard Duration:</u></b>	More Than One Week
<b><u>Recovery Time:</u></b>	Three Days to One Week
<b><u>Impact:</u></b>	

- Serious Injury or Death is Likely, but not in Large Numbers
- Moderate Damage to Private Property
- Moderate Structural Damage to Public Facilities

The group noted that extreme temperatures in the summer could lead to power system brownouts or blackouts due to high electricity demand. A database of vulnerable populations, such as the elderly, should be maintained and the emergency services should be prepared to check on the welfare of these populations during periods of extreme temperature.

**ICE STORM: 222, Moderately Low Hazard**

<b><u>Potential Impact:</u></b>	Throughout a Large Region
<b><u>Cascade Effects:</u></b>	Some Potential
<b><u>Frequency:</u></b>	A Regular Event
<b><u>Onset:</u></b>	One Day Warning
<b><u>Hazard Duration:</u></b>	Two to Three Days
<b><u>Recovery Time:</u></b>	One to Two Weeks
<b><u>Impact:</u></b>	
	<ul style="list-style-type: none"><li>• Serious Injury or Death Unlikely</li><li>• Moderate Damage to Private Property</li><li>• Little or No Structural Damage to Public Facilities</li></ul>

**EARTHQUAKE: 202, Moderately Low Hazard**

<b><u>Potential Impact:</u></b>	Throughout a Large Region
<b><u>Cascade Effects:</u></b>	Highly Likely
<b><u>Frequency:</u></b>	A Rare Event
<b><u>Onset:</u></b>	No Warning
<b><u>Hazard Duration:</u></b>	Less Than One Day
<b><u>Recovery Time:</u></b>	More Than Two Weeks
<b><u>Impact:</u></b>	
	<ul style="list-style-type: none"><li>• Serious Injury or Death is Likely, but not in Large Numbers</li><li>• Moderate Damage to Private Property</li><li>• Moderate Structural Damage to Public Facilities</li></ul>

**RADIOLOGICAL (FIXED SITE): 197, Moderately Low Hazard**

<b><u>Potential Impact:</u></b>	Several Locations
<b><u>Cascade Effects:</u></b>	Highly Likely
<b><u>Frequency:</u></b>	A Rare Event
<b><u>Onset:</u></b>	Several Hours Warning
<b><u>Hazard Duration:</u></b>	More Than One Week
<b><u>Recovery Time:</u></b>	More Than Two Weeks
<b><u>Impact:</u></b>	
	<ul style="list-style-type: none"><li>• Serious Injury or Death Unlikely</li><li>• Severe Damage to Private Property</li><li>• Moderate Structural Damage to Public Facilities</li></ul>

The Fire Departments should maintain a database of known addresses within The Town of Cortlandt that have fixed radiological sources, e.g., radiology suites, dentists, etc. All emergency response personnel should receive basic radiological awareness training.

**AIR CONTAMINATION: 196, Moderately Low Hazard**

<b><u>Potential Impact:</u></b>	Throughout a Large Region
<b><u>Cascade Effects:</u></b>	Some Potential
<b><u>Frequency:</u></b>	A Regular Event
<b><u>Onset:</u></b>	One Day Warning
<b><u>Hazard Duration:</u></b>	Two to Three Days
<b><u>Recovery Time:</u></b>	Less Than One Day
<b><u>Impact:</u></b>	

- Serious Injury or Death Unlikely
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

Vulnerable populations such as the elderly and chronically ill should be checked on by emergency service personnel to see how they are handling the conditions.

**DROUGHT: 180, Moderately Low Hazard**

<b><u>Potential Impact:</u></b>	Throughout a Large Region
<b><u>Cascade Effects:</u></b>	Some Potential
<b><u>Frequency:</u></b>	A Regular Event
<b><u>Onset:</u></b>	More than One Week Warning
<b><u>Hazard Duration:</u></b>	More Than One Week
<b><u>Recovery Time:</u></b>	Less Than One Day
<b><u>Impact:</u></b>	

- Serious Injury or Death Unlikely
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

**RADIOLOGICAL (IN TRANSIT): 177, Moderately Low Hazard**

<b><u>Potential Impact:</u></b>	Throughout a Large Region
<b><u>Cascade Effects:</u></b>	Some Potential
<b><u>Frequency:</u></b>	A Rare Event
<b><u>Onset:</u></b>	No Warning
<b><u>Hazard Duration:</u></b>	One Day
<b><u>Recovery Time:</u></b>	More Than Two Weeks
<b><u>Impact:</u></b>	

- Serious Injury or Death Unlikely
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

All emergency service personnel should receive Radiological and Haz-Mat Awareness training.

**LANDSLIDE: 172, Moderately Low Hazard**

**Potential Impact:** Several Locations  
**Cascade Effects:** Some Potential  
**Frequency:** An Infrequent Event  
**Onset:** No Warning  
**Hazard Duration:** Less Than One Day  
**Recovery Time:** Three Days to One Week

**Impact:**

- Serious Injury or Death Unlikely
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

The group noted that T.S. Floyd caused a local road to fail in 1999.

**CIVIL UNREST: 166, Moderately Low Hazard**

**Potential Impact:** Single Location  
**Cascade Effects:** Some Potential  
**Frequency:** An Infrequent Event  
**Onset:** No Warning  
**Hazard Duration:** Less Than One Day  
**Recovery Time:** Less Than One Day

**Impact:**

- Serious Injury or Death is Likely, but not in Large Numbers
- Moderate Damage to Private Property
- Little or No Structural Damage to Public Facilities

**EPIDEMIC: 165, Moderately Low Hazard**

**Potential Impact:** Throughout a Large Region  
**Cascade Effects:** Some Potential  
**Frequency:** A Rare Event  
**Onset:** Several Days Warning  
**Hazard Duration:** More Than One Week  
**Recovery Time:** One to Two Weeks

**Impact:**

- Serious Injury or Death to Large Numbers
- Little or No Damage to Private Property
- Little or No Structural Damage to Public Facilities

**Hazard(s) rated as low: HURRICANE, WILDFIRE HURRICANE: 142, Low Hazard**

**Potential Impact:** Throughout a Large Region  
**Cascade Effects:** Highly Likely  
**Frequency:** A Rare Event  
**Onset:** Several Days Warning  
**Hazard Duration:** One Day  
**Recovery Time:** One to Two Weeks

**Impact:**

- Serious Injury or Death Unlikely
- Moderate Damage to Private Property
- Moderate Structural Damage to Public Facilities

The Town of Cortlandt's emergency services should have a NOAA weather radio available in their dispatch centers. Residents should be advised to purchase battery operated radios and at least one day's supply of emergency food and supplies.

**WILDFIRE: 132, Low Hazard**

**Potential Impact:** Several Locations  
**Cascade Effects:** Some Potential  
**Frequency:** A Rare Event  
**Onset:** Several Hours Warning  
**Hazard Duration:** Two to Three Days  
**Recovery Time:** One to Two Days

**Impact:**

- Serious Injury or Death Unlikely
- Moderate Damage to Private Property
- Little or No Structural Damage to Public Facilities

## Biggest Hazards

### *HAZARDS THAT OCCUR WITH NO WARNING\**

*FIRE*

*HAZMAT (IN TRANSIT)*

*TRANS ACCIDENT*

*HAZMAT (FIXED SITE)*

*UTILITY FAILURE*

*OIL SPILL*

*EXPLOSION (DETONATION)*

*WATER SUPPLY CONTAMINATION*

*STRUCTURAL COLLAPSE EXPLOSION*

*TERRORISM*

*EARTHQUAKE*

*RADIOLOGICAL (IN TRANSIT)*

*LANDSLIDE*

*CIVIL UNREST*

\*No warning was selected from the Onset Tab.

### *HAZARDS THAT OCCUR MOST OFTEN\**

*FIRE*

*HAZMAT (IN TRANSIT)*

*TRANS ACCIDENT*

*HAZMAT (FIXED SITE)*

*UTILITY FAILURE FLOOD*

*SEVERE STORMS EXPLOSION*

*WINTER STORM (SEVERE)*

\*A frequent event was selected on frequency Tab.

### *HAZARDS THAT PRESENT THE GREATEST THREAT TO LIFE\**

*TRANS ACCIDENT*

*HAZMAT (FIXED SITE)*

*EXPLOSION (DETONATION)*

*STRUCTURAL COLLAPSE*

*DAM FAILURE*

*TERRORISM*

*EPIDEMIC*

\*Serious injury and death in extremely large numbers was selected from the Impact.

## **Recommendations**

Based upon this analysis, the Westchester County Office of Emergency Management recommends that The Town of Cortlandt examine some basic preparedness and prevention programs.

The Town should develop or update its Comprehensive Emergency Plan. This plan should clearly identify the chain of command for decision makers. An updated list of contact numbers for key decision makers should be updated at least annually.

The Supervisor, Mayor, Village Manger and their designees and the municipalities' legal representatives should understand what legal emergency powers designated by Article 2-B of the New York State Executive Law are available to them. Legal documentation should be prepared in advance and reviewed by counsel. Wide emergency powers are available to Chief Executives during a State of Emergency and should be familiar to all key decision makers.

The plan should delineate the responsibilities of all Town of Cortlandt, Village of Buchanan, and Village of Croton-on-Hudson departments during an emergency. Standard operating procedures for all departments should be updated and drilled annually. An Emergency Operations Center (EOC) should be developed and used during significant emergencies. The EOC should be supported by multiple communications means such as radios, telephones, fax machines and network communications.

Further, The Town of Cortlandt should identify structures that can be used as a shelters for residents should the need arise. The American Red Cross has a great deal of information and expertise on selecting and managing shelters and may be able to provide valuable assistance.

The Town should investigate continuity of government issues in the event that Town and/or Village Halls become unusable. One or two sites in the jurisdiction should be identified as potential temporary housing for government. These sites should be investigated for information technology capabilities such as phone and network systems. A pecking order for re-establishment of individual departments should be identified in the Comprehensive Emergency Plan.

Fire was identified as the highest hazard facing the Town of Cortlandt. To mitigate some of the impact from this hazard, the Town Fire Inspector should become as proactive as possible with their fire inspections. Annual fire inspections of all multiple dwellings and places of assembly should be conducted. Firefighters should participate in inspections and familiarization exercises of locations throughout the Town that have known hazardous materials onsite. Inventory databases should be developed for these sites. Locations that have the highest life hazards such as schools, public assembly and multiple residential dwellings should be familiar to all emergency personnel. The Fire Departments should be involved in the development or review of emergency plans for these locations and they should be drilled on regularly. These preparations apply equally to the other high hazard identified; explosion. The thirteen hazards identified as moderately high hazards should be reviewed with the idea of developing potential mitigation strategies in the future.

The Town of Cortlandt should use this Hazard Analysis as a guide for developing a comprehensive Emergency Plan. This analysis also fulfills the first requirement of

the Disaster Mitigation Act of 2000 (DMA 2000) that requires local communities develop mitigation strategies for identified hazards. The DMA 2000 program is mandatory for local communities that might be seeking funding for mitigation projects through the Hazard Mitigation Grant Program. To be eligible for mitigation project funding in the future, The Town of Cortlandt will need to develop a Mitigation Plan that identifies the strategies the Town will take to mitigate identified local hazards. The deadline for the submission of the DMA 2000 plans is November 1, 2004.

