

Policy: AD-06-41

Policy Title: Risk Assessment Policy

Policy Purpose: Develop a methodology to attain the greatest reduction of risk

Implementation Date: 09/22/2006

Revision Date: N/A

**TOWN OF WESTFIELD
PUBLIC WORKS DEPARTMENT
RISK ASSESSMENT POLICY**

Purpose: Develop of a methodology to allocate resources to attain the greatest reduction of risk to malevolent acts that could potentially be inflicted upon Westfield Public Works by employing a systematic approach to improving security by prioritizing the risks, impacts and hazards at facilities and surrounding communities, then determining what preventative measures or corrective action can be taken to mitigate or eliminate the risk or hazard.

Assess the vulnerability of a facility's components or critical features by: Using tools such as the Risk Assessment Code (RAC) and the Vulnerability Analysis Chart to quantify the probability and impact of the incident. The higher the number in the assessment equates to a greater risk.

1. Identify and list the facility or component in the first column. Estimate the probability of an incident or occurrence in the second column titled **Probability**. Factors to consider in this category are: **Historical** – have incidents occurred in this community or facility before? If so, what types of activity has occurred. **Geographic** – what can potentially happen as a result of the facility's location; does the facility use, store or manufacture hazardous materials (chlorine)? What is the proximity to major transportation routes (or avenues of approach). Where are the densely populated areas, neighborhoods, locations where large numbers of people would congregate – such as shopping malls or schools or airports. **Technological** - cascading events resulting from safety system failure, telecommunications failure, power, fire, explosions computer system, heating /cooling, and emergency notification failure. Human Error – are people trained to respond to an emergency situation? What is the impact of a lack of training, maintenance, carelessness or fatigue? **Physical** – Does the design, layout or construction of the facility enhance or detract from the security and safety of the work force and the public.
2. By entering a low number such as 1 or 2 this would signify a low probability of an event happening. A higher numeric rating such as a 4 or 5 would signify a higher probability of an event occurring.
3. Assess the Potential **Human Impact** in the third column – Analyze the potential impact of an incident or emergency in terms of deaths and injuries. If one or more civilians or bystanders were to be killed or seriously injured in an event, then the number in this column would be a higher number. Using the Risk Assessment Code (RAC) will assist in quantifying this numeric rating. Consider the impact of an explosive blast using the attached table on blast effects. Assign a numeric rating in the Human Impact column of the Vulnerability Analysis Chart. By entering a low number such as 1 or 2 this would signify a low probability of an event happening. A higher numeric rating such as a 4 or 5 would signify a higher probability of an event occurring. Using the Risk Assessment Code (RAC) will assist in quantifying this numeric rating.
4. Assess the Potential **Property Impact** in the fourth column – Consider the location, building or property for both physical and financial losses and damages. Does the design, layout or

construction of the facility enhance or detract from the security and safety of employees and the public. Consider the impact of an explosive blast using the attached table on blast effects. Assign a numeric rating in the Property Impact column of the Vulnerability Analysis Chart. By entering a low number such as 1 or 2 this would signify a low probability that an event would affect the property. A higher numeric rating such as a 4 or 5 would signify a higher probability of an adverse effect on the property. Using the Risk Assessment Code (RAC) will assist in quantifying this numeric rating.

5. Assess the Potential **Business and Financial Impact** – Consider the following as it would affect the following operations or business activities: production delays, employees unable to report to work, customers unable to drink from the community’s water supply or purchase basics such as groceries or other consumables, interruption of critical supplies, interruption of product distribution. Also consider cascading events resulting from system failure, telecommunications failure, power, fire, explosions computer system, heating /cooling, and emergency notification failure. Consider human error, what is the impact of a lack of training, maintenance, carelessness or fatigue. Assign a numeric rating in the fifth column, Business Impact column of the Vulnerability Analysis Chart. By entering a low number such as 1 or 2 this would signify a low probability of an effect on the business. A higher numeric rating such as a 4 or 5 would signify a higher probability that the business would be adversely affected by the incident. Using the Risk Assessment Code (RAC) will assist in quantifying this numeric rating.
6. Assess **Internal Resources** – Assess internal resources and ability to respond. War game various types of emergencies you have dealt with in the past. Did you have the internal resources available to mitigate the emergency? Consider the incident or emergency from beginning to end and the lessons learned. Assess a numeric rating in the sixth column, Internal Resources of the Vulnerability Analysis Chart. A low number such as 1 or 2 would signify that the internal resources are adequate to respond with the adverse effects of an incident. A higher numeric rating such as a 4 or 5 would signify that internal resources are not adequate to respond to an incident. Using the Risk Assessment Code (RAC) will assist in quantifying this numeric rating.
7. Assess the **External Resources** - Are external resources available or would other events preclude external assistance. What external resources are available for the specific business or facility to rely on, or will they have other higher priorities? Other factors to consider: are mutual aid agreements in place, are there agreements with specialized contractors, is additional specialized equipment needed. Confer with the county EMA or LEPC to discuss this issue further. Assess a numeric rating in the seventh column, External Resources of the Vulnerability Analysis Chart. A low number such as 1 or 2 would signify that support or assistance from external source would be available. A higher numeric rating such as a 4 or 5 would signify a higher probability that assistance would be needed. Using the Risk Assessment Code (RAC) will assist in quantifying this numeric rating.
8. Total the numeric entries in the eighth column. The greater the total the greater the risk to the operation or facility.

Assess the vulnerability of the facility’s elements or components – Use tools such as the Risk Assessment Code (RAC) and the Vulnerability and Impact Analysis Chart to quantify the probability and impact of the incident. Note that the higher the number in the assessment equates to a greater risk to personnel, equipment and facilities.



Bruce A. Hauk, Director
Westfield Public Works Department