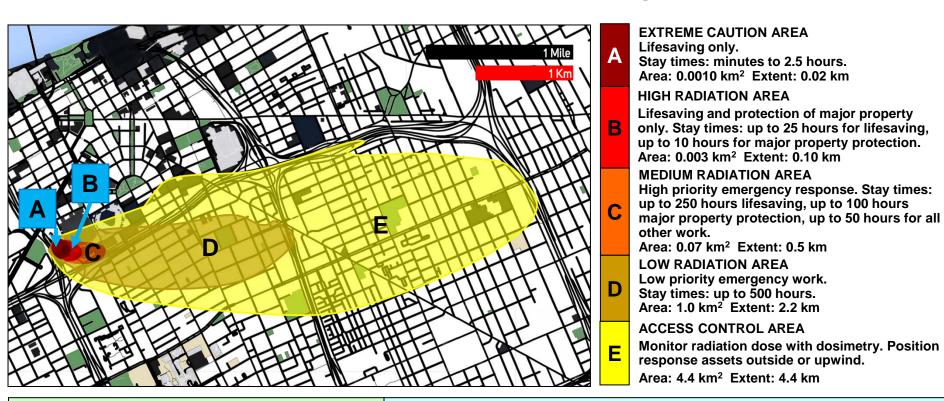




**RDD Explosion** 

# **Worker Protection Areas Based on Exposure Rate**



## **Assumptions:**

- Areas shown are model predictions based on an estimated source term but no measurements.
- Residual radioactive ground contamination is the concern.

#### Notes:

- Access is limited via Stay Times and Turn Back Limits to assure worker doses do not exceed limits.
- Different dose limits apply for lifesaving, protection of major property, and general response work.
- Workers must leave the Access Control Area upon reaching control limit.
- Assure health physics professionals supervise dosimetry in Access Control Area.

# **Text Description for Image**

### **Worker Protection Areas Based on Exposure Rate**

This map is applicable to both IND and Radiological Dispersal Device (RDD) incidents. The model is based on the assumed magnitude of the explosion and radioactive "source term" (i.e., the type(s) and amount(s) of radioactive material involved in the incident) and the predicted or observed meteorological conditions. It delineates areas where radiation dose rates due to radioactive materials deposited on the ground exceed pre-defined values, typically 10 R/h (100 mSv/h), 1 R/h (10 mSv/h), 100 mR/h (1 mSv/h) and 10 mR/h (0.1 mSv/h). Responders and decision-makers will use this map during all phases of the response to identify areas in which detailed mission planning would be required to due radiation levels, and to determine stay-times for emergency responders based on the nature of their mission (i.e., life-saving, protection of property, radiation monitoring, etc.).