Example: Information for Developing Technical Data	
Item	**Purpose**
Materials at Risk	This is the total quantity of materials in the facility. It is the starting point for determining the source term and is available in reference documents in the technical support centers and emergency operation centers. It is information the Responders (Players) should have.
Source Term	That quantity of the materials at risk that are impacted by the event. This quantity is used as the basis for the plume modeling. For example, there may be 10 chlorine cylinders on the loading dock (materials at risk) but only one is released (source terms).
Release Height	The height at which the material enters the atmosphere. This may be at ground level or a stack height. It is used for modeling.
Pool Size	This is for spills of a liquid hazardous material. It is used in modeling to determine the rate of evaporation.
Release Fraction	This represents the percentage of material released into the atmosphere. It takes into consideration the environmental impacts on the materials (fire) and the efficiency of barriers between the release and the atmosphere (HEPA filters or building leak factors). It is used in modeling.
Wind Speed and Stability Class	These are used in the plume model. They impact the distance that the hazardous materials will travel. Use the predetermined meteorological conditions when available or use multiple sets based on site meteorological history when actual conditions are used.
Units of Measure	Document the use of the English or metric system. Document the units of measure that the data provides (i.e., parts per million [ppm], counts per minute [cpm], etc.). **Caution***:* When working with multiple agencies, ensure the outputs are in units of measure that can be used for all monitoring equipment.
Description of Chemical Properties	Obtain and attach the Material Safety Data Sheet (MSDS). The MSDS documents thresholds, identifies the effects on the human body (for use in exercise medical data), and recommends protective equipment for Responders (Players) and other pertinent information. **Note**: Select the MSDS with the same or similar percentage of the chemical that you are using (e.g., nitric acid solutions normally

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Item	**Purpose**
	range from 5% to 30% nitric acid).
Description of Radiological Properties	Describe the properties of the isotope. Include the chemical form of the material (i.e., gas, solid, liquid) and the percentage of material in solution. Document thresholds for determining protective actions.
Radiological Daughter Products	Document the characteristics of any daughter products that result from the event. The daughter products are more "dangerous" than the original material.
Other Scenario Required Data	Other scenario-required data might include leak factors of buildings expected to be in the plume or interaction of radiological and chemical source terms when the source term is mixed waste.
Document Alarms/Monitoring Devices in the Release Path	These devices will either annunciate at a threshold (stack alarms) or provide a continuous data stream with material concentrations. Additionally, some sites have air-monitoring devices around specific facilities or at site boundaries. If these types of devices are at or near the event scene/facility, plan to provide for sounding or simulating local alarms and providing data to remotely monitored alarms/systems in the manner in which it would normally be displayed to Responders (Players). *Caution:* This documentation may require development of additional messages for alarm annunciations and data readouts.
Document Data Requirements	Technical staff and plume modelers select the types of model output using this information. The most common uses are • Field modeling data, including deposition, air concentrations, and dose rates • Contamination data on buildings, injured, and those "picked up" by responders and response vehicles • Habitability data in selected downwind facilities