

## **Risk Communication and Risk Assessment Primer for Environmental Cleanup Programs at Federal Facilities**

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*Due to site-specific issues and contaminants at each facility, ASTSWMO does not endorse conducting these activities at all federal facilities.*

This primer has been developed as a resource for State and Territorial federal facility risk managers and project managers who communicate risk information to the public. It is written to provide information that can be used to help increase an understanding of risk communication and risk assessment, and key factors helpful in communicating risk. This primer is based on information gathered by the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) Community Involvement Focus Group.

### **For More Information:**

The primer, and two fact sheets - one on Risk Communication, and one on Risk Assessment can be found at:

[astswmo.org/publications\\_federalfacilities.htm](http://astswmo.org/publications_federalfacilities.htm)

Risk Assessment and Risk Communication are two of many tools used in interpreting and communicating environmental data, results, and cleanup decisions. They are effective when used properly. Public involvement at federal facilities has evolved over the years and many lessons learned have been shared. The old way of checking off the box for public involvement, Decide – Act –Defend, commonly called DAD, fell by the wayside as communities were empowered and environmental awareness was more commonplace. Communities demanded more information and a seat at the decision making table. Collectively the Department of Defense, federal and State environmental agencies worked collaboratively with the public in planning for meaningful community involvement throughout the cleanup process. Today community involvement plans are routinely developed to ensure the public understands a process is in place to both inform and involve the community. As more information is shared on how to implement effective community involvement programs, communicating risk is important in gaining public input prior to decision making. Communicating scientific information, including risk, can be difficult to discuss in basic layman terms.

Risk Communication is often challenging due to a variety of issues including:

- Increased emotion.
- Limited access to or availability of facts.
- Voluntary versus involuntary risk.
- The translation of technical information.
- Sense of loss of power and/or control.
- Political factors.
- Perception.
- Rumors.
- Speculations.
- Assumptions.
- Uncertainty.

A community may not trust the party responsible for the contamination. While there are a variety of community involvement techniques that can be used to present risk-related information, the actual communication of risk requires additional thought and preparation.

The science of risk assessment is based on probabilities and this concept is unsettling to many. Uncertainty in toxicity information, fear, and often a lack of trust all contribute to the difficulty in explaining risk assessment results. There are many ways that the risk assessment can be used to make cleanup decisions. Some of the uses include probability modeling to help with remedial decision making, determining site-specific cleanup standards, and evaluating residual risks after a cleanup has been performed. Since there are so many ways to use the risk model, it is important to discuss uncertainties and limitations of the model so people understand the intent and application of the model presented. A benefit of explaining how and why a risk assessment is being used is to reduce the public perception that it can be used to manipulate data on a site and potentially affect the final remedy selected. Therefore, it is important to clearly identify the objectives of the risk assessment and communicate this information to the public early in the process.

A well thought out community involvement process, including the dissemination of risk related information, will result in an informed community and a risk-based, publicly accepted solution.

### **For More Information**

Contact the Federal Facility Community Involvement Focus Group on the Web at [http://astswmo.org/programs\\_federalfacilities.htm](http://astswmo.org/programs_federalfacilities.htm)

*“The mission of the Community Involvement Focus Group is to identify issues and to encourage improved partnerships between States, Communities and Federal agencies.”*

### **Federal Facility Community Involvement Focus Group Members**

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