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**The Dynamic Nature of Risk in DOE Facilities in the Surveillance  
and Maintenance Program - with Observations for Risk Communications**

We explore three case studies of facilities at two U.S. Department of Energy former nuclear weapons research and production Sites - the Oak Ridge National Laboratory and the Hanford Site - whose risk profiles have changed during their long-term management under the DOE's Surveillance and Maintenance (S&M) program. These case studies provide examples of the challenges faced in the communication of circumstances surrounding unexpected events or the emergence/discovery of new risk-important information at historically high-risk sites to external stakeholders, such as federal and state regulators, local communities surrounding the Site, as well as the general public. We identify common topics of importance from these case studies and suggest a taxonomy for risk communicators to use in informing the dialogues with individuals and organizations that may not be technically oriented or fully-informed on the subject matter. The taxonomy is based on technical insights from the quintessential definition of risk known as the Kaplan-Garrick "risk triplet" as well as insights from regulatory guidance documents on risk communication with external stakeholders originally developed for the commercial nuclear power industry.