

# **Creating “Bullet-Proof” Environmental Information – A Case Study in Driving an Emergency Response to a Highly Managed Process**

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Environmental data collection involves a series of activities, each having inherent uncertainty, that when propagated across the entire process can result in substantial total uncertainty. Emergency response activities by their nature do not lend to decreasing uncertainty. The challenge when generating high-quality environmental data is to move from a chaotic emergency response to a mature managed process in the shortest period of time. Quick and visionary decision-making by TVA relative to a high-quality sampling, analytical, and data collection system soon after the Kingston, Tennessee, ash release event, resulted in a highly sophisticated database containing defensible (“Bullet-Proof”) environmental data from which conclusions could be drawn, decisions could be made, and against which regulatory benchmarks could be compared. This presentation will provide insight on the many challenges that faced TVA, the decisions that TVA made with assistance from Environmental Standards, the impacts of these decisions, and the lessons learned.