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APPLICATION OF THE DELFIC FALLOUT PLANNING TOOL AND ORIGEN FALLOUT ANALYSIS TOOL TO NATIONAL TECHNICAL NUCLEAR FORENSICS (NTNF)[#]

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The objective of this project was to provide a robust **Fallout Planning Tool** for the NTNF interagency ground sample collection team. This project is meeting NTNF needs with models to predict the physical, chemical, and radiological properties of fallout debris. The **Oak Ridge Isotope Generation** (**ORIGEN**) code is a validated, radionuclide production and decay code that was implemented into the **Fallout Analysis Tool**. The **Defense Land Fallout Interpretive Code** (**DELFIC**) is a physics-based, DTRA research reference, fallout prediction capability. It is used to predict concentration of fallout, particle sizes, fractionation ratios, dose rate and integrated dose over planned collection routes.

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