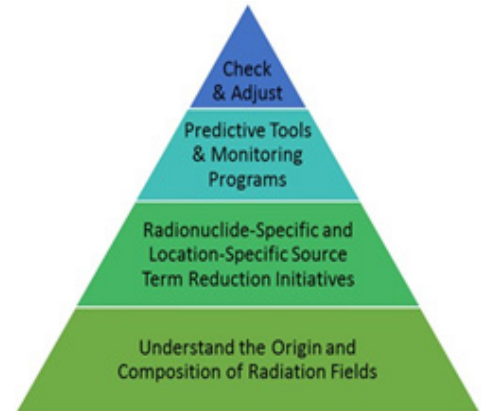


Value Delivered

- ✓ Ensured success with proven leadership strategies
- ✓ Effective technology transfer to utility personnel
- ✓ Program sustainability through continued monitoring
- ✓ Seamless cross-discipline collaboration
- ✓ Practiced technical rigor with affordable & effective solutions
- ✓ Collaboration with industry leaders
- ✓ Identification of radiation fields origin
- ✓ Radionuclide-specific & location-specific initiatives
- ✓ Minimized radiation fields & reduced CRE

Industry Challenge

Collective radiation exposure (CRE) reduction is one of the most complex problems facing the industry today. Dose goals are pushed to lower levels while the changes needed to reach these improved levels of performance are difficult to discern. So a fact-based source term reduction program is essential to achieve CRE goals, a strategy that includes initiatives targeting all five steps of radiation field formation.



ChemStaff Solution

The experts at ChemStaff can meet this complex challenge. Our specialist, with extensive plant experience, understand the factors that influence radiation fields and use their expansive knowledge base to eliminate the uncertainty associated with radiation field reduction programs. ChemStaff works diligently with plant personnel to develop a comprehensive fact-based source term reduction program with radionuclide-specific and location-specific initiatives designed to target and solve critical source term problems. ChemStaff also provides both initial and ongoing monitoring programs to measure improvements and promote ongoing success.

STEP 1	STEP 2	STEP 3	STEP 4	STEP 5
Introduction and Release	Deposition on Fuel	Neutron Activation	Release from Fuel	Deposition or Incorporation
Atom of nickel or cobalt introduced or released into reactor coolant	Atom of nickel or cobalt deposited on fuel	Atom of nickel or cobalt activated to form gamma-emitting radionuclide	Atom of radionuclide released from fuel into reactor coolant	Atom of radionuclide deposited on or incorporated into surface

