Figure 4 - Expertise Required to Effectively Manage Results from the Risk Analysis Screening Tool (RAST)

Using RAST in a PHA Team

1. Identify Equipment or Activity to be Analyzed
   - Chemical reactivity

2. Identify Chemical and Process Hazards

3. Develop Scenarios

4. Analyze Consequences
   - Source modeling (leaks; ruptures) and Dispersion modeling (plumes; distances; etc.)
   - Consequence Analysis (Impact from toxic release, fire pools, Vapor Cloud Explosions (VCE), etc.)

5. Estimate Frequency
   - Equipment Failure Rates (Probability of Failure on Demand (PFD))

6. Analyze Risk
   - Risk Analysis (Societal risks)

7. Implement Additional Safeguards as Needed
   - Bow Ties (Barriers)
   - Layer of Protection Analysis (LOPA) (Independent Protection Layers (IPLs))

8. Sustain Safeguards for Life Cycle of Facility