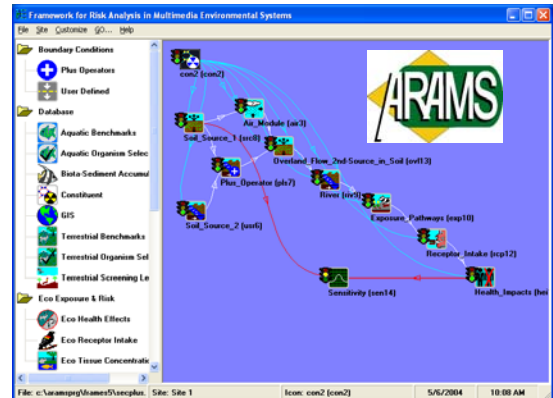


The Adaptive Risk Assessment Modeling System (ARAMS™)

ARAMS™ is a Windows-based, information delivery, dynamic modeling, and analysis system that integrates *multimedia* fate/transport, exposure, intake/uptake, and effects of contaminants and military relevant compounds to assess *human* and *ecological* health impacts/risks for existing, baseline and future conditions. ARAMS™ was developed for the Army to provide the means to assess health risks in a more efficient and standardized manner.



ARAMS™ uses the object-oriented Framework for Risk Analysis in Multimedia Environmental System (FRAMES) for linking objects on the fly for integrated modeling. This approach provides a unique capability for risk assessment by coupling predictive fate and transport modeling with exposure/risk assessment, thus, allowing analysis of time-varying future risk conditions for risk management. The integrated modeling framework also provides great flexibility for assessing a wide array of exposure scenarios. The integrated framework modeling approach provides the means to very rapidly set and run relatively complex exposure scenarios.

ARAMS™ capabilities include:

- ✧ human and ecological health risk assessment
- ✧ can use measured or predicted exposure data
- ✧ can assess existing or future, time-varying exposure/risks to help manage sites for compliance and sustainment
- ✧ site-specific assessments
- ✧ screening-level or comprehensive risk assessments
- ✧ can assess a wide array of exposure pathways and uptake routes
- ✧ sensitivity and uncertainty analysis using Monte Carl simulation
- ✧ seamless linkages to Web-based and local databases to filter and load data for assessment
- ✧ flexible graphical and textual output options including generating RAGS reports
- ✧ multiple model choices for most objects

Keywords: fate/transport, integrated modeling, exposure/risk assessment

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