

Decision Support Tool Matrix

Decision Support Tool	Functions	Interactive (I) or File Input (F)	File Input/Output					Contaminants					Media					Potential Technical Team Members		
			Tabular Input	Tabular Output	Graphic Input	Graphic Output	Print Report?	Metals	Chlorinated Solvents	SVOCs	Pesticides / PCBs	Petroleum	Radionuclides	Soil / Sediment	Soil Gas	Air	Surface Water		Groundwater	
AMD Treat http://amdtrat.osmre.gov/amdtrat.asp	Cost Estimating Calculators (Water Quality) ■	I	NA	NA	NA	NA	Yes	√	NA	NA	NA	NA	NA	NA	NA	NA	√	√	Engineer Geochemist	
ARAMS http://www.wes.army.mil/el/arams/arams.html	Human Health Risk Assessment ■ Ecological Risk Assessment □ Statistical Analysis □ Conceptual Site Model □	I	NA	xls txt	NA	NA	Yes	√	√	√	√	√	√	√	√	NA	√	√	Risk Assessor	
BIOCHLOR http://amdtrat.osmre.gov/amdtrat.asp	Analytical Modeling ■ Site Screening ■ Remedial Process Selection □	I	NA	NA	NA	xls	Yes	NA	√	NA	NA	NA	NA	NA	NA	NA	NA	√	General technical staff familiar with chemical fate and transport	
BIOPLUME III http://www.epa.gov/ada/csmos/models/bioplume3.html	Numerical Modeling ■ Visualization □ Remedial Process Selection ■	I	NA	csv txt	bmp	bmp	Yes	NA	√	NA	NA	NA	NA	NA	NA	NA	NA	√	Hydrogeologist General technical staff familiar with chemical fate and transport	
BIOSCREEN http://www.epa.gov/ada/csmos/models/bioscrn.html	Analytical Modeling ■ Remedial Process Selection □	I	NA	xls	NA	xls	Yes	NA	NA	NA	NA	√	NA	NA	NA	NA	NA	√	Hydrogeologist	
CAMEO http://www.epa.gov/ceppo/cameo/cameo.htm	Database ■ Emergency Response Tool ■ Regulatory Reporting (EPCRA) ■ Analytical Modeling □	I/F	mer	zip	jpg	jpg	Yes	√	√	√	√	√	√	√	√	√	√	√	Emergency Responder	
FIELDS http://www.tiem.utk.edu/~fields/	Visualization ■ Initial Sampling □ Secondary Sampling ■ Geospatial Interpolation ■ Cost-Benefit Analysis □ Human Health Risk Assessment □ Ecological Risk Assessment □	F	xls	dbf txt	dxg	jpg	Yes	√	√	√	√	√	√	√	√	√	NA	√	√	GIS Technician Statistician Staff familiar with interpolation techniques
FSPLUS http://www.tiem.utk.edu/%7Efields/	Visualization ■ Geospatial Interpolation ■ Data Acquisition □	F	dbf	NA	dxg	jpg	No	√	√	√	√	√	√	√	√	√	NA	√	√	Statistician Staff familiar with interpolation techniques
GeoSEM http://esc.syrres.com/geosem/default.htm	Visualization ■ Statistical Analysis ■ Geospatial Interpolation ■	F	xls mdb	dbf	many ²	shp	No	√	√	√	√	√	√	√	√	√	√	√	Risk Assessor Statistician	
Groundwater Sensitivity Toolkit http://www.gsi-net.com/software/GroundwaterSensitivity.htm	Site Screening ■	I	NA	xls	NA	NA	Yes	√	√	NA	NA	√	NA	NA	NA	NA	NA	√	Hydrogeologist	
HSSM http://www.epa.gov/ada/csmos/models/hssmwin.html	Visualization ■ Analytical Modeling ■	I/F	dat	NA	NA	bmp	Yes	NA	√	NA	NA	√	NA	√	NA	NA	NA	√	Hydrogeologist	
Johnson - Ettinger model http://www.epa.gov/superfund/programs/risk/airmodel/johnson_ettinger.htm	Human Health Risk Assessment ■ Analytical Modeling ■	I	NA	xls	NA	NA	Yes	NA	√	NA	NA	√	NA	NA	√	NA	NA	NA	Risk Assessor	
MAROS	Data Management ■		xls	xls	NA	xls	Yes												Hydrogeologist	

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http://www.gsi-net.com/software/Maros.htm	Monitoring Network Optimization Statistical Analysis	■ ■	I/F	mdb ¹	mdb htm							√	√	√	√	√	√	NA	NA	NA	NA	√	Statistician
NAS http://www.cee.vt.edu/nas/	Visualization Remedial Process Selection Analytical Modeling Numerical Modeling	■ ■ ■ □	I	NA	NA	NA	xls	Yes				NA	√	NA	NA	√	NA	NA	NA	NA	NA	√	Hydrogeologist General technical staff familiar with chemical fate and transport
On Site http://www.epa.gov/athens/learn2model/part-two/onsite/	Analytical Modelling Calculators Sensitivity Analysis	■ ■ □	I	txt	txt	NA	NA	No				√	√	√	√	√	√	√	√	√	√	√	General technical staff familiar with chemical fate and transport models
RESRAD http://web.ead.anl.gov/resrad/home2/	Human Health Risk Assessment Ecological Risk Assessment Analytical Modeling Uncertainty Analysis Sensitivity Analysis	□ □ □ □ □	I	NA	xls	NA	NA	Yes				NA	NA	NA	NA	NA	√	√	NA	√	√	√	Risk Assessor Technical Staff familiar with using RESRAD
SADA http://www.tiem.utk.edu/~sada/	Visualization Secondary Sampling Initial Sampling Geospatial Interpolation Statistical Analysis Human Health Risk Assessment Ecological Risk Assessment Cost-Benefit Analysis	■ ■ □ ■ □ □ □ □ □	F	csv	csv	dx shp	jpg	Yes				√	√	√	√	√	√	√	√	NA	√	√	Risk Assessor Statistician Staff familiar with interpolation techniques
SCRIBE http://www.ertsupport.org/scribe_home.htm	Data Acquisition Form/Label Generation Database	■ ■ □	I/F	txt	htm	NA	NA	Yes				√	√	√	√	√	√	√	√	√	√	√	General technical staff familiar with sampling and field work
SourceDK http://www.gsi-net.com/Software/SourceDK.htm	Analytical Modeling Remedial Process Selection	■ ■	I/F	xls	NA	NA	NA	No				NA	√	√	√	√	NA	NA	NA	NA	NA	√	Hydrogeologist General technical staff familiar with chemical fate and transport models
VSP http://dqp.pnl.gov/vsp/	Visualization Initial Sampling Secondary Sampling Statistical Analysis Cost-Benefit Analysis	■ ■ ■ ■ □	I/F	txt	txt	dx shp	dx shp	Yes				√	√	√	√	√	√	√	√	√	√	√	Statistician

Notes:

File input and output formats are represented in the matrix by the file extension. ASCII files, for example are indicated by the extension "txt."

EPCRA = Emergency Planning and Community Right-to-know Act

1 ERPIMS data can be imported through an Access file or a series of text files (.tes, .res, .sam, .ldi).

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2 GeoSEM uses several GIS vector and raster file formats: DOD vector product format (VPF) , ESRI product files, CAD drawings (dxf), ASCII II grids, and georeferenced image formats such as geoTIFs, bitmaps, GIFs, JPGs, and ERDAS.

Legend: