

Using the **MIGRATEv9** software, contaminant transport from multiple sources, either at the surface or buried, can be modeled quickly and accurately in two-dimensions.

Unlike finite element and finite difference formulations, MIGRATEv9 does not require the use of a "time-marching" procedure. MIGRATEv9 uses a finite-layer technique (Rowe & Booker, 1991; Rowe et al, 1994) that provides numerically accurate and stable results, while requiring relatively little computational and data entry effort.

In addition to advective-dispersive transport, MIGRATEv9 can consider sorption, radioactive and biological decay, and transport through fractures.

One or more landfills, buried waste, spills, or disposal ponds can be modeled. These contaminant sources may be adjacent or offset from each other. Model properties may be either constant or transient, with the concentrations calculated at specified times, depths, and distances.

MIGRATEv9 is a DOS program that can be run in a Windows shell. The program supports a limited number of printers and screen resolutions.

Pricing Information



GAEA Technologies offers a number of pricing solutions for MIGRATEv9. We are very proud of our software and offer a 30 day money-back guarantee. Now you can shop when it is convenient for you. Shop online, by telephone, fax or email. We accept major credit cards and company checks. Academic discounts of 50% are available on most of our software. If you would like an academic discount please contact us at <u>sales@gaea.ca</u> to order.

MIGRATEv9	\$US1,695.00
Upgrade to MIGRATE Version 9	\$US300.00
POLLUTEv7 and MIGRATEv9	\$US2,390.00



Features



Model multiple contaminant sources, for example to represent landfill extensions.

Vary properties with time, to simulate such effects as the failure of engineered systems.

Simulate radioactive or biological decay.

Include 1-D, 2-D, or 3-D fractures in any layer.

Simulate secondary leachate collection systems using a passive sink in any layer.



Model contaminant sources as surface boundary conditions or as a physically buried layer.

Have the source concentration deplete with time or remain constant.

Remove leachate using a leachate collection system.

Specify the base as an aquifer impermeable, or zero concentration boundary condition.

Specify both horizontal and vertical velocities and hydrodynamic dispersion coefficients for each layer.

Model non-conservative species using linear sorption.



Graphical User Interface

Create primary liner, composite liner (e.g. U.S. Subtitle D), or primary and secondary liner landfill models easily.

Interactively create, edit, display, and print models.

Execute models interactively or in batch mode, batch files can contain multiple models.

Graphically display and print concentration vs time, distance or depth.

Display graphs on most popular screen types, including SVGA.

Print graphs on the most widely used printers, or store them as PCX format files.

Import and convert POLLUTE data files.

Access extensive context sensitive on-line help.

System Requirements

IBM PC compatible computer. Microsoft or compatible mouse. Math co-processor. High resolution graphics display. 640K of RAM. DOS 3.0 or higher.



Questions

Frequently Asked Questions

- How can I get technical support?
- What are the system requirements?
- What demos are available?
- What documentation is available?
- How do I order software?
- Is there a discount for universities?
- What is the difference between POLLUTEv7 and MIGRATEv9?

How can I get technical support?

All programs come with technical support for 3 months. This support includes software problems and technical problems regarding the use of the programs. To obtain technical support contact <u>Customer Service</u>.

What are the system requirements?

To run MIGRATEv9 the following are required.

- IBM PC compatible computer.
- Microsoft or compatible mouse.
- Math co-processor.
- High resolution graphics display.
- 640K of RAM.
- DOS 3.0 or higher.

What demos are available?

A free fully functional demonstration disk is available and can be downloaded by clicking here.

What documentation is available?

All programs come with a comprehensive User's Guide. These guides contain information on background theory, data entry and definition, references, and numerous examples.

In addition, <u>numerous papers</u> have also been published that describe the theory and uses of the POLLUTEv6 and MIGRATEv9 programs. These papers can be obtained by contacting <u>Customer</u> <u>Service</u>.

How do I order software?

The software can be ordered through the Internet or by contacting Customer Service.

Is there a discount for universities?

There is a discount for POLLUTEv6 and MIGRATEv9 for universities and colleges of approximately 50 percent.

What is the difference between POLLUTEv7 and MIGRATEv9?

POLLUTEv7	MIGRATEv9
- Windows	- DOS
 models advective-diffusive transport vertically through aquitard and aquifer layers and model advective transport horizontally through aquifers. 	-models advective-diffusive transport vertically and horizontally
- models non-linear Freundlich and Langmuir sorption.	- models linear sorption only.
- models contaminant transport from one source only.	 models contaminant transport from multiple sources that can start at different times.