

## RESit: PROGRAM FOR PREDICTING OF SPREAD RIVERS POLLUTION

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RESit is a software for modeling of spread of hazardous substances on riverbeds and its tributaries in time and space in emergencies, when pollutants can evolve in water was developed. It outputs result by such parameters:

- Peak of concentration of searched profile;
- Travel time of the peak to the lower searched profile.

It has “Maximum allowed concentration” module, which could show, does peak of concentration are allowed, or not, and if it will be allowed.

Has two modes of work:

- “Manual” mode;
- “Automatical” mode.

“Manual” mode allows user to do calculations by own route. In this case input data will be next:

- Catchment area at spill site;
- Catchment area at measurement points;
- Average runoff of measurement points for last years;
- Distance from spill site point;
- Pollutant mass, which spread into water;
- Measured discharge at measures points.

“Automatical” mode already has route, so some data don't need to be inputted. In this case, input data will be next:

- Pollutant mass, which spread into water;
- Measured discharge at measures points.

RESit can show result in such views:

- Table view (there is a table which includes information about points, and its output result);
- Graphical view (shows graphics according to output result);
- Map view (shows, which point this result belong) (available only at “Automatical” mode).

Its output result could be saved in \*.xls and \*.kml, which are compatible with such programs, as Google Maps, ArcGIS, QGIS and other GIS applications.

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