About PCGEMS User's Guide

Abstract

The Personal Computer Version of the Graphical Exposure Modeling System (GEMS), called PCGEMS, is a complete information management tool designed to help you in performing exposure assessment studies. With PCGEMS, you may easily estimate chemical properties and perform simulation studies of chemical release in air, soil and groundwater systems. To enhance and further evaluate these simulation studies of chemical release, you may draw upon datasets of information such as population distribution, weather and wind statistics, and varieties of soils native to the area that you are studying.

PCGEMS contains extensive user support and can assist you through every step of PCGEMS with help messages, instructions, and error messages. PCGEMS is also designed to interact extensively with GEMS which resides on the VAX Cluster of computers at Research Triangle Park, North Carolina. This allows you to call upon the resources of the EPA VAX Cluster to better support your studies.

This document guides you through the many functions that make up PCGEMS. It instructs you on how to load the system, how to best use the access the user instruction built into the system, and other general information about the system. With regard to the environmental modeling programs and chemical property estimation programs that make up the heart of the system, this guide explains the scope and capabilities of each

program as well as the type of input necessary to run them. This manual also illustrates and explains screens that appear if you choose any of the programs in the graphics option, the data management option, the utilities option, the risk exposure assessment option, and the communications option. Since PCGEMS can be used in conjunction with GEMS, information on whom to contact for help and information is also provided. The manual also describes the databases available in PCGEMS including the size, the variables in the database, the programs that access the database.

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