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DOSFACTER II/PC

A Code for Calculation of Dose-Rate Conversion Factors for Exposure to Photons and Electrons for PC

DOSFACTER II/PC is a version of the **DOSFACTER** code. It estimates dose-rate conversion factors for exposure to photons and electrons emitted by radionuclides dispersed in the environment. The exposure modes considered are immersion in contaminated air, immersion in contaminated water, and irradiation at a height of 1 meter above a contaminated ground surface. The source region for each exposure mode is assumed to be effectively infinite or semi-infinite in extent with a uniform radionuclide concentration throughout the source region. The dose-rate factors are computed for a whole-body dose and for a dose to 24 body organs.

For air and water immersion, the body-surface dose-rate factors were based on the conservation of energy requirement that all of the emitted energy is absorbed in the infinite medium. For ground-surface exposure, the body-surface dose-rate factors were calculated at a point 1 meter above the ground using a point-kernel integration method and known specific absorbed fractions for photons and electrons in air. For photons only, the dose-rate factors for 24 body organs were calculated for each exposure mode using the organ dose-rate factors for air immersion estimated by Poston and Snyder

We at **Galaxy Advanced Engineering, Inc.** (**GAE**) have taken the steps to produce the PC version i.e. **DOSFACTER II/PC**. Currently the program is operating on IBM/PC or 100% compatibles under PC/DOS or PC/Windows95/98/2000/XP/ME and NT operating system. To obtain the code and more information, please contact our company or call us at 650-302-3993