

Monte Carlo simulation into environmental assessment simulator tools, so that environmental exposures and health-based risk assessment analyses can be conducted. This combined deterministic-probabilistic computational methodology must include a user-friendly interface and should not rely on third-party or proprietary software programs or licensing to accomplish this task.

d. Serve as a leading technical resource that provides information and assists in developing methodologies and setting the standard for use of methods for incorporating fuzzy system mathematics and modeling in the area of exposure assessment and exposure-dose reconstruction.

e. Provide technical consultation and assistance in the development of a user friendly decision support system that considers, but is not limited to, the following:

(1) Site characterization and exposure scenario data.

(2) Environmental-media fate and transport computations.

(3) Exposure-route analysis and computations.

(4) Chemical-compound intake and exposure-dose computations.

(5) Probability distributions and uncertainty analyses.

(6) Spatial analysis computations and a geographic information systems interface.

(7) Access to the decision support system by means of desktop computational devices available throughout the agency and in its exposure-dose reconstruction computational laboratory.

f. Provide technical consultation and assistance in applying innovative and emerging exposure-dose reconstruction methodologies and computational analyses, described above, to areas characterized by contaminated environmental media that may pose potential health risks to the public.

g. Provide information on development of methodologies related to exposure-dose reconstruction by submitting, as progress warrants, manuscripts to symposia, conferences, and peer-reviewed scientific journals on the developments and methodology describing aspects of the research on exposure-dose reconstruction.

h. Organize and conduct workshops, conferences, or symposia to publicize and promote benefits of methodologies developed and to transfer technology as part of the research program on exposure-dose reconstruction.

i. When the project is completed, recipient will summarize activities in a written report that includes the

methodology describing the exposure-dose reconstruction process as applied to the public health assessment process.

## 2. *ATSDR Activities*

a. Collaborate with and assist in the development of plausible exposure-dose methodologies, relations, and criteria for the selection and application of computational tools, and define appropriate assumptions.

b. Serve as a direct conduit for accessing environmental and exposure data and hazardous waste site information that would be of value to recipient organization to test and validate the acceptability of the environmental assessment simulator tools developed as part of the exposure-dose reconstruction research program.

c. Collaborate with and assist recipient organization with benchmarking, testing, and evaluation of methodology driven exposure-dose reconstruction assessment computational tools by providing recipient organization with results derived from application of methodology driven exposure-dose reconstruction assessment computational tools when applied to hazardous waste sites.

d. Collaborate with and assist recipient with identifying and pursuing emerging disciplines related to advances in assessment of exposure to hazardous chemicals and mixed wastes typically associated with hazardous waste sites.

e. Provide technical assistance to recipient organization to extend the appropriate use of novel exposure characterization and dose relations protocols to hazard characterization and communication efforts.

f. Assist recipient organization in communicating information on development of methodologies related to exposure-dose reconstruction by submitting, as progress warrants, manuscripts to symposia, conferences, and peer-reviewed scientific journals on the developments and methodology describing aspects of the research on exposure-dose reconstruction.

g. Assist in the development and dissemination of advances in the areas of exposure-dose reconstruction methodologies to all relevant scientific and technical groups and communities including state and local governments and the public.

h. Assist in the planning, organization, and conduct of workshops, conferences, or symposia to publicize and promote benefits of methodologies developed; and assist with the transfer of technology, as part of the research program on exposure-dose reconstruction.

i. Collaborate with recipient to summarize program activities in a written report that includes the methodology describing the exposure-dose reconstruction process as applied to the public health assessment process.

## F. **Content**

### *Applications*

The Program Announcement title and number must appear in the application. Use the information in the Program Requirements, Other Requirements, and Evaluation Criteria sections to develop the application content. Your application will be evaluated on the criteria listed, so it is important to follow them in laying out your program plan. The narrative should be no more than 50 pages, single spaced, printed on one side, with one inch margins, and unreduced 12-point font.

The narrative should consist of, at a minimum, a Plan, Objectives, Methods, Evaluation and Budget. The objectives must include a project schedule for the entire five-year project. (See evaluation criteria 1.d.) The application must include a 200-word or less abstract of the proposal. The application pages must be clearly numbered, and a complete index to the application and its appendices must be included.

## G. **Submission and Deadline**

### *Application Forms*

Submit the signed original and two copies of PHS 398 (OMB number 0925-0001). Adhere to the instructions on the Errata Instruction Sheet (posted on the CDC web site) for PHS 398. Forms are available at the following Internet address: <http://www.cdc.gov/od/pgo/forminfo.htm>.

If you do not have access to the Internet, or if you have difficulty accessing the forms on-line, you may contact the CDC Procurement and Grants Office Technical Information Management Section (PGO-TIM) at: 770-488-2700. Application forms can be mailed to you.

### *Submission Date, Time, and Address*

The application must be received by 4 p.m. Eastern Time on June 30, 2003. Submit the application to: Technical Information Management-PA #03059, CDC Procurement and Grants Office, 2920 Brandywine Road, Atlanta, GA 30341-4146.

Applications may not be submitted electronically.