

SCAPA Source Term Working Group

Charter

Accurate source term characterizations are an important information asset that is needed to support safety and health assessments at Department of Energy (DOE) and National Nuclear Security Administration (NNSA) sites. Technical issues frequently arise involving the estimation of source terms for potential releases. These releases may involve radiological, chemical, biological, and nanotechnology materials. To assist the DOE and NNSA community in effectively addressing source term issues for emergency planning, preparedness, and response applications, the DOE Subcommittee on Consequence Assessment and Protective Actions (SCAPA) is establishing a Source Term Working Group.

The Source Term Working Group shall provide assistance and recommendations to DOE and NNSA sites and the DOE Office of Emergency Management (NA-41) on issues related to characterizing the following properties of the released materials:

- type and quantity
- release fraction (with an emphasis on characterizing the dispersible and respirable fractions)
- size distribution
- physical and chemical properties
- deposition and resuspension properties
- chemical transformations
- radiological decay
- energy of release
- initial plume behavior

The goal of this effort is to provide an appropriate and adequate level of technical information and support to allow the sites to accurately characterize potential source terms.

In addition to addressing these technical issues, the Source Term Working Group shall:

- Foster communication and mutual support relative to source term characterizations among all DOE and NNSA sites;
- Monitor activities of, and support technical communication with, other Federal and state agencies, academia, and professional organizations working to characterize the source terms of potential materials of interest;
- Promote innovation, technology transfer, and benchmarking for source term characterizations and modeling efforts.

The Source Term Working Group Chair shall be a contractor employee at a DOE or

NNSA site working in the area of consequence assessment modeling, source term studies, or emergency preparedness and response. The Source Term Working Group Chair shall be appointed and serve at the discretion of the SCAPA Chair and the DOE Office of Emergency Management's Source Term Working Group advisor. A Vice-Chair may be appointed to assist the Chair in performing working group administrative and managerial duties.

Source Term Working Group membership shall consist of representatives from DOE and NNSA sites as well as from DOE Headquarters. Representatives may be contractor employees or DOE oversight staff. Source Term Working Group membership shall be open to:

- DOE/NNSA Headquarters, site office, or site contractor staff members with responsibilities in consequence assessment modeling, chemical exposure, biosafety, or emergency management programs;
- SCAPA members who are interested in source term issues. Representation on the Source Term Working Group should include members from the SCAPA Consequence Assessment, Chemical Exposures, Chemical Mixtures, and Biosafety Working Groups. Multidisciplinary representation is needed to address the many cross-disciplinary issues associated with source term characterization. To this end, joint activities with other working groups are encouraged; and
- Members of other organizations that are involved in source term characterization work may be invited to participate in the Source Term Working Group by the working group's Chair, the Chairs of other SCAPA working groups, the SCAPA Chair, or the DOE Office of Emergency Management working group advisor.

The Source Term Working Group shall maintain regular communication among its members. The working group shall conduct a minimum of three conference calls (or other virtual meetings) per year and shall convene a meeting during the week of the annual SCAPA conference.

The Source Term Working Group shall communicate its activities to SCAPA on a regular basis. The Chair, Vice Chair, or a designated member of the Working Group shall report on group activities during each of SCAPA's regularly scheduled conference calls and provide a summary presentation of working group activities and accomplishments at the annual SCAPA conference.