

Facility Audits

Several radiological control and environmental compliance program audits have been conducted at multiple sites across the country for the DOE AU and Environmental Management (EM) programs. ESSAP's long term involvement and experience working with the NRC and other federal agencies can be readily utilized when conducting audits for these agencies.

Instrument Evaluations

In addition to the HDER program, staff members have conducted extensive operational evaluations of specialized instrumentation (e.g., large area floor monitors and associated readout devices) developed by outside parties for potential use in final status building decommissioning surveys.

PEIS and ALARA Assessments

Technical reviews of DOE headquarters programmatic environmental impact statements (PEIS) have been conducted and recommendations provided. Evaluations of an ALARA Center at a DOE contractor facility were performed to aid the contractor in promoting its capabilities to potential users across the DOE Complex.

Working with ESSAP

Please contact us to discuss assistance to your organization. DOE facilities may readily access ESSAP's technical assistance by issuing a scope of work and funding transfer through either a FIN plan or Interoffice Work Order (IWO). Contact ORISE's Financial Operations at (865) 241-3368.

Other government agencies need only issue a scope of work and funding transfer through the DOE Oak Ridge Operations Office Work for Others (WFO) office. Contact ORISE's WFO office at (865) 576-8533.

For more information about ESSAP areas of technical assistance and our capabilities contact:

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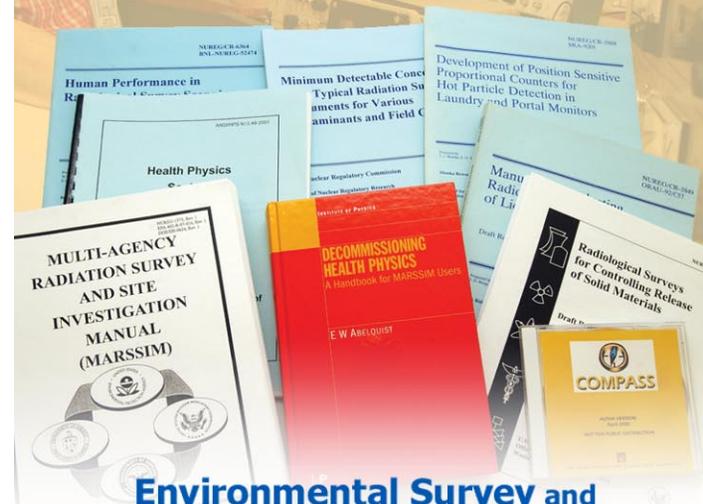
Or visit our Web site at
www.ora.gov/essap



The Oak Ridge Institute for Science and Education (ORISE) is a U.S. Department of Energy facility focusing on scientific initiatives to research health risks from occupational hazards, assess environmental cleanup, respond to radiation medical emergencies, support national security and emergency preparedness, and educate the next generation of scientists. ORISE is managed by Oak Ridge Associated Universities.

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Health Physics and Technical Projects



Since its inception in 1980, the **Environmental Survey and Site Assessment Program (ESSAP)** of the Oak Ridge Institute for Science and Education (ORISE) has been well recognized for its technical expertise and assistance. The U.S. Department of Energy (DOE) and the U.S. Nuclear Regulatory Commission (NRC) have utilized ESSAP to complete the independent evaluation of radiological conditions at sites undergoing decommissioning throughout the United States. Associated with this expertise are a group of experienced professionals with the capabilities to provide additional technical and health physics support services to federal agencies and contractor organizations in a variety of areas.

Staff Expertise

The ESSAP staff consist of certified health physicists (CHPs), health physicists (including individuals registered with the National Registry of Radiation Protection Technologists), nuclear engineers, environmental specialists, radiochemists, and analytical chemists. Staff members have also been nationally recognized as evidenced by substantial initial and ongoing activities associated with the development, training, and evolution of the widely used Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM). As needed, the staff can augment its internal programmatic expertise with additional support to its clients using other programs within ORISE, including the Professional Training Programs, the Radiation Emergency Assistance Center/Training Site (REAC/TS), and the Center for Epidemiological Research.

Areas of Assistance

ESSAP's technical and health physics support group marshals the industry-recognized expertise and experience of ORISE health physicists to offer a full range of health physics support in facility audits, decommissioning reviews, dose modeling, instrument evaluations, internal and external dosimetry, and related technical evaluations. Our health physics projects have included the following:

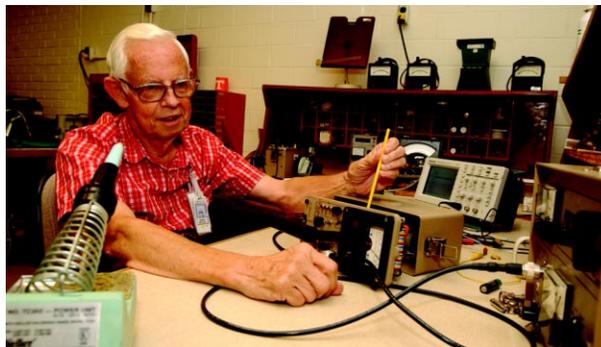
Environmental Survey and Site Assessment Program

ESSAP

Oak Ridge Institute for Science and Education

Homeland Defense

Since its origination in 2001 within the DOE's Office of Assets Utilization (AU), ESSAP staff have been intimately associated with the Homeland Defense Equipment Reuse (HDER) program. This program has received official DOE headquarters support and national attention from the Director of Homeland Defense. Our staff have assisted the DOE task manager with a variety of support activities, including evaluating a wide



variety of surplus instrumentation for acceptance into the program, refurbishing instrumentation, and preparing instruments for shipment. The program has since grown in importance with the 2002 collaboration of the DOE and the Department of Justice (DOJ) in a ten-city pilot project to provide refurbished instrumentation to first responder agencies.

Decommissioning and Clearance of Materials

ESSAP staff helped create the D&D Science Consortium (DDSC) in 2001 and have continued technical support of the DDSC Web site (<http://www.ornl.gov/ddsc/>), in particular the "Ask an Expert" feature. Our staff have also assisted NRC headquarters with several special research projects, including the development of draft NUREG/CR-5849 (1992), NUREG-1507 (1998), and the recently issued draft NUREG-1761, *Radiological Surveys for Controlling Release of Solid Materials*.



MARSSIM

ESSAP was involved with the original MARSSIM working group, and have since developed the COMPASS software and training classes to aid in MARSSIM implementation. More than 50 MARSSIM courses have been taught by ORISE health physicists. The text, *Decommissioning Health Physics: A Handbook for MARSSIM Users*, was also developed by an ESSAP staff member.

Lead Management

Since 2001 ESSAP has worked directly with the DOE Oak Ridge Operations National Center of Excellence for Metals Recycle (NMR) to assist DOE contractor sites with the disposition of lead stockpiles through a directed reuse program rather than disposal (where possible). ESSAP staff have evaluated contractor characterization data packages and offered recommendations, developed lead management guidance, and performed independent verification surveys of incoming lead to verify its radiological character.

