

Site Assessment

Remediation

Engineering

Regulatory Compliance

Environmental Planning

Clean Water Services

Environmental Information Management

Litigation Support

Weiss is a small business under NAICS Code 56291 for Remediation Services and a State of California certified Small Business, Cert. No. 31594.



Radiological Services

Weiss Associates delivers long-term value through tailored environmental solutions

Weiss Associates is a full-service environmental science, engineering, and management firm serving the private and public sectors since 1980. With offices in Emeryville, Mountain View, and Livermore, California, we have a reputation for providing top-quality technical expertise in response to a range of environmental issues.

Weiss has provided radiological services at several private-sector biotechnology facilities and at U.S. Department of Energy facilities, including Lawrence Livermore National Laboratory, Lawrence Berkeley National Laboratory, SLAC National Accelerator Laboratory, Hanford, and the Laboratory for Energy-related Health Research at the University of California, Davis.

DECONTAMINATION AND DECOMMISSIONING

Weiss supports D&D activities by characterizing materials and soils to identify the presence or absence of radiological contamination. In conformance with DOE or NRC requirements, Weiss uses MARSSIM-specified methods to systematically develop data quality objectives and to execute survey and sampling plans. Depending on the client's objectives, Weiss can delineate surface and volumetric contamination in real time, facilitating decontamination and ultimately the reduction of radiological waste.



A recent MARSSIM survey plan developed by Weiss for Lawrence Berkeley National Laboratory was identified by the client's radiological manager as "the best MARSSIM work plan they had seen." The survey was successfully completed at this site in late 2010, resulting in data that supported a significant reduction in the volume of radiological waste generated during demolition over original estimates.

CERCLA AND RCRA COMPLIANCE

Weiss has more than 25 years of experience conducting site cleanup activities at CERCLA and RCRA sites in California. At sites where radiological releases have occurred, Weiss has performed a broad range of management, characterization, remediation, and reporting activities, including:

- Soil and groundwater sampling
- Operation of onsite field laboratories
- Transport modeling
- Dose and risk assessment modeling using RESRAD
- Excavation
- Capping
- Air monitoring
- Waste characterization
- Waste shipment
- Preparation of regulatory documents
- Regulatory negotiation with the U.S. EPA and California agencies, including the RWQCB, DTSC, and DPH-Radiation Health Branch

SOIL AND GROUNDWATER REMEDIATION

Weiss has extensive experience remediating soil and groundwater contaminated with radionuclides and mixtures of chemicals and radionuclides. In 2007, Weiss directed a remedial cleanup of technologically enhanced, naturally occurring radioactive material (NORM) at a construction site. Activities included pre-removal soil and groundwater characterization, RESRAD dose modeling to develop cleanup goals, preparation of the removal work plan, development of safety controls and personnel dosimetry, air monitoring, construction oversight, regulatory negotiation, development of long-term engineering and land-use controls for residual contamination, and reporting.

Weiss planned and conducted several large removal actions at the Laboratory for Energy Related Health Research (LEHR)/Old Campus Landfill Superfund site, where more than 8,000 cubic yards of low-level radioactive waste were generated and safely disposed of offsite. The removal resulted in a limited-action Record of Decision, which was approved by DOE and EPA in 2009.

WASTE MINIMIZATION, CHARACTERIZATION, AND DISPOSAL

Weiss works to minimize the volume of radioactive waste generated during D&D activities by:

- Developing data quality objectives for design of the characterization plan
- Basing the characterization approach on government-accepted guidelines (e.g., MARSSIM)
- Using real-time survey and analytical techniques to segregate impacted waste
- Characterizing waste prior to generation when possible, particularly when mixed waste may be present
- Using dose modeling to release waste with *de minimis* levels of added radioactive material where appropriate,

Weiss has used RESRAD to assess public doses associated with reuse of gravel and concrete and to establish risk-based cleanup levels for a variety of radionuclides and site conditions. In one instance, Weiss' analysis supported DOE's decision to release more than 1,000 cubic yards of low-level radioactive waste for reuse as backfill.

Weiss has characterized and shipped more than 10,000 cubic yards of low-level radioactive waste and NORM to licensed disposal facilities using both truck and rail conveyances. Weiss has also managed and disposed of sealed sources and radiological standards.

Specific areas of expertise

MARSSIM surveys

RESRAD dose modeling

Onsite analytics

CERCLA risk assessment

Release of materials under DOE Order 5400.5, Radiation Protection of the Public and the Environment

Waste management plans

Federal contracting

Federal acquisition regulations

Non-reactor nuclear facility management

Negotiation with the U.S. EPA, DTSC, RWQCB and, DPH-RHB

Air monitoring

Meteorological station operations

CAP-88 modeling

California-Certified radon tester

Soil removal actions

Weiss has more than 15 years of experience managing projects with radiological hazards including:

Decontamination and decommissioning

CERCLA and RCRA compliance

Soil and groundwater remediation

Waste minimization, characterization, and disposal

