



STATEMENT OF QUALIFICATIONS



***Environmental Site Management
Site Assessments & Surveys
Facility Decontamination
Waste Management
Soil Remediation
Hazardous Materials
Emergency Response***

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Introduction



Solutient Technologies, LLC has earned a solid reputation as a small business industry leader and national provider of full-scope radiological services, environmental consulting, and remediation services designed to meet the varied needs of governmental and industrial clients. Our technical excellence, depth of resources, financial strength, national presence, and client focus are the basis for our reputation of providing responsive, high quality, and innovative services.

Solutient's staff provides professional radiological support services to the Department of Energy, Department of Defense, and private by-product and source material licensees. Our headquarters are located in North Canton, Ohio, and we operate three regional offices in Oak Ridge, Tennessee, Columbus, Ohio and Los Angeles, California. By strategically focusing on our target markets with a firm commitment to customer service, Solutient has steadily expanded its service capabilities, geographic presence, and client base. We are well positioned to provide comprehensive environmental services tailored to meet our clients' needs anywhere in North America.

Company History

Incorporated in 1997, Solutient was founded by a group of investors who also owned several other unrelated and non-competing businesses. The firm was later purchased by a team of Solutient employees and is now privately owned and chartered in Ohio as a Limited Liability Corporation (LLC).

Early efforts focused on the use of proprietary decontamination technologies to significantly reduce disposal volumes and remediation costs. As the business matured, Solutient developed more of a full service offering expanding into environmental site management, site assessments and surveys, and facility decontamination. With expertise in all aspects of radiation safety and radiation measurement, Solutient offers complete development, implementation and oversight for all facets of Decontamination and Decommissioning (D&D) programs. Additional areas of expertise include radiological risk assessment, emergency planning, and health physics program development, implementation and management.

The key element to our growth was the issuance of a mobile D&D License by the State of Tennessee. Solutient currently maintains licenses in the states of Ohio and California, making us one of the few companies today with more than one D&D license for possession and operation on a permanent basis. Other state and federal jurisdictions recognize these licenses under reciprocity agreements and permit the management of radioactive material at work sites throughout the United States.

Solutient's current licenses enable the possession and management of up to one (1) curie of each isotope from atomic number 1-103, ten (10) curies of tritium, and in special cases, unlimited activities for sealed sources, including weapons grade material, on behalf of our clients at their sites.

Commitment to Safety



Safety is our highest priority at Solutient. We are committed to conducting our operations in a way that protects people, property, communities, and the environment. Safety is viewed as a critical element of every project. We believe that all injuries and occupational illnesses can be prevented. In fact, Solutient has one of the best safety records in the industry with Injury/Illness Rates (IIR) and Experience Modification Rates (EMR) of less than 0.8, well below both national and industry standards. This outstanding performance record is a direct result of our well-trained staff, state-of-the-art programs and procedures, and corporate commitment to safety and health.

Solutient has never received a regulatory notice of violation or incident by any state or federal agency for work performed in North America.

Innovative Developments



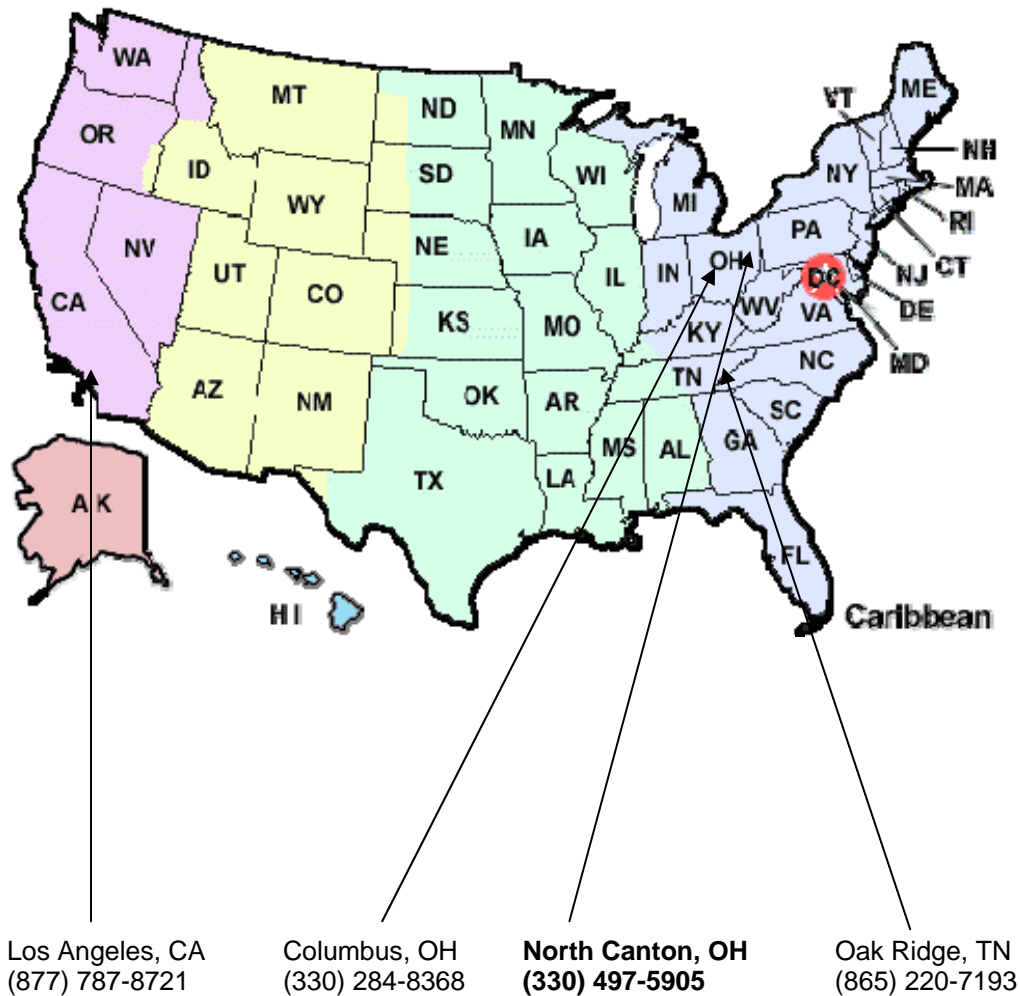
Over the years, Solutient has become a leader in our development of innovative techniques and procedures within our industry. In the process of managing and completing dozens of remediation projects, Solutient has consistently achieved the highest level of productivity while maintaining worker safety. The result has been a net cost savings to our clients. Examples of these innovative developments include:

- Techniques to remove soil in two to six-inch lifts to minimize waste
- Unique survey system to efficiently measure large areas
- Efficient health physics techniques to improve operator efficiency
- Training programs to use typical construction workers for projects
- Special material handling techniques
- Special waste packaging optimization programs

For additional information, please visit our website at:

www.solutientech.com

Our Geographic Coverage



Solutient has four offices to serve the needs of our clients. In addition to our offices, Solutient maintains two separate radioactive materials licenses in the following states:

- Ohio
- California

Solutient has served a variety of clients in more than 20 states throughout the U.S. and has actively performed services in the Canadian provinces. Canadian clients should contact our headquarters office in North Canton, Ohio for more details.

Solutient Services

Environmental Site Management

Solutient provides a comprehensive approach for managing environmental conditions at our clients' facilities. Solutient has successfully completed a number of projects that include the comprehensive analysis, site characterization, decontamination, and radiological decommissioning of facilities throughout the United States. With extensive experience in radioactive waste management particularly the design and implementation of large-scale remediation projects, Solutient has the experience to restore site conditions at contaminated sites thereby permitting unrestricted access to the general public.

Facility Decontamination



Solutient Technologies utilizes the most advanced environmental surface preparation, cleaning and decontamination technologies. Whether the surface is wood, concrete or metal, Solutient has experience in cost effectively and safely decontaminating it. Previous projects completed by Solutient include decontamination of floors, walls, structural components, as well as equipment including pumps, motors, piping, tools, and even vehicles.

Solutient utilizes aggressive traditional techniques such as scabbling and scarifying, CO₂, high-pressure water, needle guns, shot and sand blasting as well as a host of other methods. Solutient also employs more advanced methods of decontamination such as the Advanced Recyclable Media System (ARMS™). This extraordinary technology removes and absorbs low-level radioactive contaminants and hazardous materials from almost any surface. Oil, grease, paint, soot and heavy metals, including lead and depleted uranium can be remediated utilizing the ARMS™ technology thereby reducing previously contaminated surfaces to benign, ordinary substrates, suitable for all standard solid waste disposal or recycling techniques.

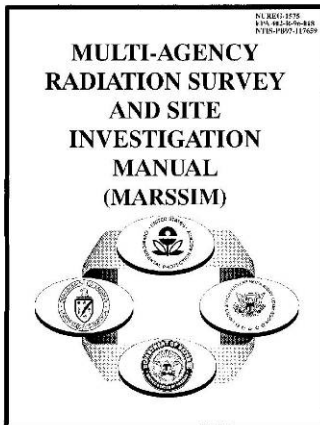


Our goal is to address our clients' specific contamination problems with the most reliable, cost effective and safe decontamination techniques available.

Site Assessments and Surveys



One of the initial key elements for any project is a complete and accurate site assessment. This allows for detailed planning thereby insuring a successful remediation project while at the same time controlling project costs. Site assessments may include instrumentation surveys, air monitoring, water sampling, geological surveying/sampling, and contamination surveying. All site assessment results are recorded and our client receives a comprehensive report of all findings with recommendations for proceeding to the next phase, if necessary.



Solutient has successfully performed numerous site surveys at client facilities. Our surveys incorporate all the industry recognized and approved surveying methodologies, which include, but are not limited to the following:

- NUREG-1575, *Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)*
- NUREG/CR-5849, *Manual for Conducting Radiological Surveys in Support of License Termination*
- Regulatory Guide 1.86, *Termination of Operating Licenses for Nuclear Reactors (NRC 1974)*

Solutient utilizes state of the art equipment in the performance of all surveying activities and routinely utilizes Global Positioning System (GPS)-assisted equipment to survey larger areas for contamination. Solutient's radiological equipment inventory is unparalleled in the industry, thus providing our clients with the assurance that the survey results are timely and accurate. This information better advises the Project Manager how best to reduce risks, eliminate the contamination and restore the site to its original condition.

Soil Remediation



During the last few decades, numerous facilities have been identified as having large volumes of contaminated soil. Until recently, remediation and disposal options were limited and the few options available were costly. Recent alternatives for disposal and the opening of additional landfills throughout the United States have provided new options for the cost effective disposal of contaminated material. Solutient examines all possible disposal alternatives on behalf of our clients to maximize efficiencies, limit liability and reduce costs.

Solutient has completed a significant number of soil remediation projects. These efforts typically require interfacing with regulatory agencies to set site release limits, evaluating remediation alternatives, performing soil excavation and loading, container transport by rail and truck, and site closure sampling. To date, Solutient has safely removed and disposed of more than 50 million pounds of soil for our clients.

Waste Management



Radioactive decontamination or remediation projects require expert waste management techniques to ensure that regulated wastes are safely characterized and properly disposed. Solutient implements a *Total Waste Management (TWM)* approach on all projects which involves intensive characterization activities including a variety of sample analysis procedures, both destructive and non-destructive analysis, on-site spectroscopy, radiation measurements, and historical site investigations. Off-site independent laboratories are utilized to perform verification sampling required for waste disposal profiling thus assuring compliance with each sites' waste acceptance criteria.

Solutient has successfully managed many of our clients' waste control programs and currently transports to all active radioactive waste repositories and processing facilities nationwide.



Solutient's *Total Waste Management* approach includes the following:

- Complete waste characterization of radioactive and hazardous wastes
- Packaging of waste materials (drum, box, gondola, sealand, High Integrity Containers (HIC's), special shielding containers, etc)
- Obtaining waste profile approvals from processing and disposal facilities
- Labeling of containers, and manifest and shipping document preparation
- DOT approved and trained Qualified Shippers
- Transportation services by truck and rail
- Emergency response for transportation incidents

Brokerage Operations



Solutient provides quality radioactive waste brokerage services to various government and commercial clients. Solutient has successfully brokered numerous radioactive waste shipments for government clients such as the Department of Defense and the Department of Energy's Oak Ridge Operations. Solutient maintains qualified brokers as required by each agency which, depending on the contract requirements, are utilized in either a prime contractor or subcontractor role.

Solutient has been very successful in managing commercial clients' wastes through a complex decision-making process matching specific waste streams to specific disposition pathways. Our goal is to maximize the use of all available processing and/or disposal alternatives in order to minimize the overall costs to our clients.



Hazardous Materials

Many remedial projects have multiple hazards which demands that highly trained professionals properly characterize, package, transport, and dispose of a wide variety of hazardous and radioactive wastes. Solutient's utilizes a *Total Waste Management* (TWM) approach for identifying, packing and disposing of all RCRA, TSCA and radioactive wastes from our clients' facilities dramatically reducing the overall costs for the project while ensuring regulatory compliance. The following information describes Solutient's hazardous materials services:

Lab Pack Services

Solutient provides cost-effective preparation, transportation and disposal of waste laboratory reagents from private and public laboratories, academic facilities, R&D centers, and governmental clients. Our professionals properly identify and categorize all waste materials, satisfy label and packing requirements to meet DOT and disposal site criteria, and provide state-of-the-art recycling and disposal services.



Other Wastes

From small quantities to large volumes of material, Solutient can manage a variety of common hazardous wastes used in industrial facilities and public institutions. Examples of hazardous material routinely managed by Solutient are:

- Asbestos and Asbestos Containing Material (ACM)
- Mercury and Mercury Compounds
- Polychlorinated Biphenyls (PCB's)
- Lead

Black Mold



The growth of various molds is becoming a problem of monumental proportions, and mold growth in public, residential and commercial buildings is believed to have caused serious medical conditions. Property damage from mold growth has destroyed millions of dollars in real estate and forced homeowners from their residences.

Solutient provides experienced and professional mold inspection, sampling, and remediation services for the commercial, residential and industrial community throughout the United States. Solutient's staff provides a wide range of mold consulting and environmental consulting services.

Risk Assessment and Risk Management



Risk Assessments are used to evaluate the relative risk associated with radiological hazards. Risk Management applies the assessment results to evaluate policies and procedures, support decision-making, and design contingency plans to deal with reasonably foreseeable incidents. Solutient has developed Risk Assessment and Risk Management Programs to optimize remediation project objectives by implementing appropriate control measures to minimize worker exposure, accelerating remediation, and limit our clients' financial exposure. Examples include a project at one client's facility where a 13 Ci source measuring approximately 11 Roentgen was successfully prepared, packaged, and shipped for dispositioning with the maximum dose of 40 mrem to a single individual. Another effort was undertaken for a major steel manufacturing plant where Solutient performed a detailed Risk Assessment of their scrap metal handling procedures and radiation monitoring systems. The report was presented to senior management and major changes were implemented to their risk management policies and procedures.

Personnel Support Services



Solutient recognizes that certain projects may only require specific contract personnel to supplement an organization's EH&S staff to meet specific technical or operational requirements. Solutient routinely provides professional, highly skilled personnel to manage or perform all phases of a project.

Various professional services can be provided on a time and material basis, or on a fixed price contract basis, depending on the project requirements. Such services would include, but not limited to the following personnel:

- Certified Health Physicists
- Health Physics Engineers
- Radiological Engineers
- Industrial Hygienists
- Civil and Construction Engineers
- Radiation Safety Officer
- Health & Safety (OSHA) Compliance Specialists
- Waste Management Specialists
- Regulatory and Compliance Specialists
- Equipment Operators
- Decontamination Technicians
- Health Physics Technicians

Solutient provides quality remediation and decontamination technicians and equipment operators skilled in the use of most radiological instrumentation and operation of most decontamination equipment. All technicians receive continuing training in hazardous materials management (HAZWOPER), radiological safety, respirator use and maintenance, confined space entry procedures, forklift operations, and other OSHA related requirements related to training.

Instrumentation Sales/Lease



Solutient provides the following instrumentation sales and lease services to our clients:

- Lease and lease-to-purchase of instruments and equipment from our extensive inventory of portable instrumentation
- New instrument and equipment sales
- Professional consultation for custom instrument applications and benchmarking

Solutient provides instrumentation sales and lease services to a broad range of radiation protection and industrial hygiene professionals including the Department of Defense, academic institutions, private industry, research, and regulatory agencies. Solutient can provide the following sales and lease of the following:

- Portable radiation protection instrumentation with detectors
- Radiation detectors for portable instrumentation
- Support equipment for radiation protection instrumentation
- Portable gamma spectroscopy equipment
- In-situ pipe monitoring equipment and detectors
- Robotic systems for pipe inspection and monitoring
- Sealed sources and counting standards
- Semi-portable decontamination equipment
- Air monitoring equipment

Laboratory Services



Solutient offers a broad range of radiochemical analytical services in support of operating nuclear facilities, radioactive waste management programs, decontamination and decommissioning projects, and organizations dealing with Naturally Occurring Radioactive Materials (NORM). Some of our analytical capabilities include:

- Gamma spectroscopy; both laboratory and field capabilities
- Gross alpha and gross beta (wipe/smear counting)
- Alpha spectroscopy for radium, uranium, thorium, plutonium and others
- Radon and radium measurements in support of NORM programs

Solutient has developed a mobile laboratory for utilization at job sites in support of facility decontamination and decommissioning program activities. Please contact our main office for additional information.

Emergency Response



Solutient is available 24/7 to respond to any radioactive or hazardous materials incident anywhere in the United States.

Our toll free telephone number is:

1-(877) 787-8721

In many instances, Solutient will have staff on-site within a few hours depending on the geographical location. In all cases, Solutient will be operational within 24 hours from receiving the notification to mobilize. Solutient can expeditiously respond to any radioactive or hazardous materials incident and provide all necessary interfaces with regulatory agencies and local emergency response officials. Please contact our main office for details.

Project Summaries

Global Threat Reduction Initiative (GTRI)

Solutient Technologies is part of the Professional Project Services (Pro2Serve) small business team that was selected by National Nuclear Security Administration (NNSA) to perform contract nuclear nonproliferation services. The contract is for work to remove and secure vulnerable, at-risk nuclear and radiological materials around the world through NNSA's Global Threat Reduction Initiative (GTRI).

This five-year contract will enable Solutient and the Pro2Serve team to compete for up to \$100 million worth of individual tasks for the GTRI program tasks include removing radiological and nuclear material, working at nuclear and radiological facilities to perform security vulnerability assessments, develop security system upgrade design work, install security improvements, and train facility personnel. Solutient is proud to support GTRI's mission to reduce and protect vulnerable nuclear and radiological material located at civilian sites worldwide.

University of Rochester

Solutient Technologies' performed a turnkey remediation project at the University of Rochester's Nuclear Research Structures Laboratory (NSRL). This project included conducting a characterization survey, remediation activities, and a Final Status Survey utilizing the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM), NUREG 1575 criteria. Contaminates included tritium, ^{238}U , and ^{137}Cs . Solutient also performed a characterization study and survey of approximately 1,300 concrete shield blocks from the facility and was instrumental in obtaining approval from the regulatory body for unconditionally releasing the shield blocks.

Curtis Bay Depot Decontamination & Decommissioning Project

The Defense National Stockpile Center (DNSC) of the Defense Logistics Agency (DLA) was closing the Curtis Bay Depot (CBD) site and was seeking to terminate the associated NRC license. The site had stored thorium nitrate in fiber and steel drums under license by the Atomic Energy Commission and later from the NRC as part of the National Defense Stockpile.

Solutient conducted characterization surveys and performed remedial actions at 22 specific areas at the site resulting in their unconditional release. These areas consisted of three buildings, two concrete pads, sixteen and mass areas, and one burial pit. The final volume of waste was approximately 100,000 ft³ which was comprised of 5,232 tons of soil and concrete debris. This waste was loaded, prepared, and shipped in 46 rail cars sent to a radiological burial site. All work was validated by the Oak Ridge Institute for Science and Education (ORISE).

Hammond Depot Decontamination & Decommissioning Project

Solutient performed a remediation/characterization of the Hammond Depot which was also being closed by the Defense National Stockpile Center (DNSC) of the Defense Logistics Agency (DLA). Nine specific areas were remediated and surveyed for unconditional release per NUREG 1575, the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM). These nine areas consisted of three buildings and six land masses. The final volume of waste was approximately 106,000 ft³ which was comprised of 4,500 tons of soil and concrete debris loaded into 42 railcars sent for disposal at a radiological waste burial site. Again, all work was validated by the Oak Ridge Institute for Science and Education (ORISE).

Aerojet Chino Hills

Solutient professionals managed the remediation and decommissioning of this California facility used for assembly, testing, and storage of depleted uranium (DU) munitions. This project included surveying and remediation of seven buildings, ten test areas, two storage areas, and a single run-off area. The entire site consisted of 800 acres of land. An on-site laboratory was employed to analyze several hundred soil samples taken from throughout the site. Solutient professionals provided oversight for the entire DU remediation effort. A grid system was established to systematically survey and sample all areas for DU contamination. Over 250,000 ft³ of soil and debris was shipped to Envirocare of Utah for disposal. Solutient personnel were instrumental in efforts to restore the California site for public use.

Alliant Tech Systems

Under contract to a major defense contractor, our field services group remediated a 3,000-meter firing range used for testing large caliber kinetic energy penetrators made of depleted uranium (DU).

The areas remediated included the catch boxes for depleted uranium penetrators, practice rounds, High Explosive Anti-Tank (HEAT) rounds and the surrounding area (approximately two acres). An on-site laboratory was established for real-time analysis of contamination material. Approximately 600 soil samples were collected and analyzed with gamma spectroscopy. The data were used to identify the extent and depth of the contamination. Independent sampling was undertaken by state agencies and an independent contractor provided verification of the analytical results. Solutient professionals coordinated the construction of a rail spur to ship 200,000 ft³ of soil and debris to Envirocare of Utah for disposal. No restrictions were placed on the site for future use.

BP America

Solutient provided all site project management support and performed as the operating contractor for the radioactive materials license closure of a 100-acre industrial research facility with approximately 500,000 ft² of building space. All operations and remediation activities were conducted in accordance with the terms, conditions and directives of Solutient's Ohio Radioactive Materials License and NUREG 1575, the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM). Solutient also provided the Radiation Safety Officer for the facility license as well as Solutient's license on-site.

The project took more than 22 months to complete at a cost of approximately \$2 million dollars. Concurrent with the site remediation work were the facility-wide renovation activities being undertaken concurrently by the facility's new owners. This required that significant controls be instituted to minimize delays and additional costs to the new owner. Solutient successfully interfaced with other site contractors, existing tenants and the new owner to complete the project.

Solutient's site responsibilities included the preparation of all project related health and safety plans, QA/QC programs, radiation safety plans, and radiation work permits. Included in the 30,000 man-hours of project activities were site assessments, baseline surveying, demolition, excavation, decontamination and verification tasks. All waste management activities including waste profiling, packaging, manifesting, transporting and disposing of more than 30,000 lbs of radioactive waste were directly performed by Solutient.

Chicago Pile 5 (CP5), Argonne National Lab

Solutient remediated an area inside the pump room at the CP5 reactor using the ARMS™ technology. Solutient was required to perform a hazard analysis, build temporary containment, pass an operation readiness review, and clean radioactively contaminated concrete. At the completion of the project all equipment had been cleaned to meet free release criteria. Solutient was able to clean the concrete and complete release of the client's equipment on schedule and within budget. The ARMS technology successfully decontaminated the concrete while generating minimal waste for subsequent disposal.

Department of Defense – Rock Island Arsenal

Solutient provided the radiological expertise in support of contract work being performed by World Environmental, a qualified minority-owned 8(a) firm for the US Army's Rock Island Arsenal. Over the life of their contract, Solutient aided in the successful disposition of radioactive waste materials from the following sites:

- Picatinny Army Depot
- Iowa Army Ammunitions Plant
- Watervliet Arsenal
- Vicksburg
- Patrick Air Force Base
- Tinker Air Force Base
- Brooks Air Force Base
- Aerojet Ordnance Tennessee
- Davis-Monthan Air Force Base

Solutient maintains DoD/AFSC certified brokers required to oversee all radioactive waste shipments.

Department of Defense BRAC 2

As part of the Base Realignment and Closure Program, a task was initiated to remove 23 historic low-level radioactive waste disposal wells from one installation. Parsons Engineering Science was retained to investigate and close the site. Solutient implemented its mobile radioactive materials license to provide material control for the project. Between 1954 and 1958, wells were used for disposal of a variety of radioactive materials including ^{137}Cs , ^{60}Co , ^{90}Sr , ^{238}U and ^{226}Ra . The wells had undergone periodic flooding and the disposal containers had been compromised to varying degrees.

The site was within the bounds of the base golf course. This location posed a unique challenge to both controlling access to the site and minimizing the impact to the operational golf course. The project required the establishment of two major work areas; the first area was the actual well site where dewatering and well removal took place and the second area included a tightly controlled, temporary structure where the containers were removed from the wells. The containers were opened and the contents inventoried inside a glove box that was set up inside a sea-land container provided by the Air Force. HEPA ventilation systems maintained the glove box with negative air with respect to the sea land container.

All materials were surveyed to determine activity levels. Approximately 200 radium devices were recovered containing several ten's of micro curies of ^{226}Ra . Sources were individually tracked to comply with the Solutient Radioactive Materials License which allowed for the optimal disposal efficiency. The Air Force provided for additional analysis off-site analysis. Final closure was based on the removal of all sources and a MARSSIM assessment of the site and surrounding areas.

Large U.S. Chemical Processing Facility (Confidential Client)

This chemical processing facility was situated on a 7.09-acre parcel located outside Los Angeles, California. The site was in operation for over 75 years and manufactured clay absorbents for the petroleum refining industry including hydro-desulfurization catalysts, and Fenuron and Tordon mixtures. Several mixtures contained naturally occurring radioactive materials (NORM) with measurable concentrations of thorium and uranium. In the course of manufacturing, various areas within 16 structures comprised of approximately 89,500 ft² were contaminated with radioactive materials. Facilities included office and laboratory areas, processing equipment, tanks, and storage warehouses. Solutient's project scope included remediation and management of all radioactive materials, operation of the on-site radiological analysis laboratory, waste disposal activities associated with hazardous and radioactive waste, demolition support, and health and safety management.

The project was accomplished under several discrete tasks, including radiological decommissioning and decontamination of above grade structures, asbestos abatement, demolition of above grade equipment, structures and materials, radiological decommissioning and decontamination of below grade affected structures, soils and other material, demolition of below grade unaffected structures, utilities and materials, soil remediation, and site restoration. The on-site laboratory provided for alpha, gamma and fluorometry analysis of soil samples, and gross alpha and beta analysis of wipe samples. The laboratory delivered real-time results to the Solutient site supervisor during the characterization and remediation activities.

All activities at the site were performed under the Solutient Technologies, California Radioactive Materials License and in accordance with NUREG 1575 the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM). All plans and permits were approved by the state, county and/or city regulatory authorities. Solutient personnel developed the Site Radiological Health and Safety Plan, the Decommissioning and Decontamination Plan, conducted all necessary training, instituted the site radiological health and safety program, and provided the laboratory technical and quality assurance procedures.

Richland County, Ohio (Confidential Client)

Solutient personnel worked closely with our client, their attorney and their consulting engineer, and the Ohio EPA to perform closure activities in response to a Consent Order. Site activities included the loadout and transportation of stockpiled hazardous waste, cleanout of silo, baghouse and conveyor systems, scarification of contaminated concrete floor surfaces, excavation, loadout and transportation of contaminated soils, dismantling of the silo and baghouse, on-site waste stabilization, and metals recycling.

Safety Light Corporation (Phase I)

Solutient was contracted to characterize, sort material, repackage, and stage for disposal, more than 200 drums and 30 B-25 boxes (approximately 4500 ft³) of various waste material previously excavated from one of the underground burial silos at the site. Limited data provided by the client as to the contents of the containers indicated the presence of elevated levels of radium, as well as strontium and cesium radioisotopes. Approximately 172,000 lbs of material was shipped offsite for disposal, including concrete debris, laboratory wastes, and demolition/building debris.

Solutient's contract was initially awarded with direct US NRC oversight. Within weeks after the award, and prior to mobilization, the USEPA, along with the USNRC and Commonwealth of PA, indicated to SLC that the EPA would be drafting an Administrative Order of Consent (AOC) for the work proposed at the site. This posed a major shift in the effort, and Solutient was instrumental in moderating the tasks to be accomplished under the Consent Order, having been highly successful in balancing the project site work with all regulatory agencies involved.

The work included the preparation of an on-site staging and repackaging area, and the modification of an expanded work plan to handle the high radiation levels present in some containers. Solutient successfully relocated each container to the process area, opened each container, characterized, sorted and repackaged for disposal, and relocated each container to an on-site temporary storage area. A process building was constructed on site to manage all radioactive waste material. All on-site efforts were supported by Solutient's mobile laboratory capability as well as our portable radiation detection and support equipment inventory.

Safety Light Corporation (Phase II)

Solutient was tasked with separating low-level wastes from high-level wastes which had been collected and stored at the site. Approximately 3,600 ft³ of material was prepared and transported for disposal. Upon receipt of the material at Envirocare, Solutient personnel utilized significant engineering controls by selectively placing shielding and arranging floor plans to meet site exposure limits.

Safety Light Corporation (Phase III)

Solutient was contracted to perform a sort and segregation of 12,000 curies of tritium-contaminated materials. Approximately 10,000 curies of Class B waste was packaged and shipped to Barnwell, SC for disposal. Another 1,000 curies of Class A waste was packaged and shipped to a processing facility in Tennessee. This project was overseen by the Pennsylvania Department of Health and Region I NRC.

Shieldalloy Metallurgical Corporation

This project involved intensive use of Solutient Health Physics personnel in support of the capping of a radioactively contaminated slag pile. Previous smelting operations at the site generated a slag which contained ^{238}U and ^{232}Th . Soil contaminated with vanadium and low levels of the isotopes was excavated from around the slag pile, placed on top of the pile and capped with clean clay from a borrow area near the site. Solutient's primary objective was to monitor contamination control from trucks and personnel during this phase.

Solutient also prepared and submitted the Final Status Survey Plan in accordance with MARSSIM protocol, to the Ohio Department of Health. The plan, which was approved shortly after submittal, showing that the final status survey activities of the Class 1 areas around the slag pile met the established criteria after capping. Solutient coordinated all work with other contractors who were installing a berm around the areas being surveyed. In addition, more than 300 surveys were performed on vehicles entering the area. Solutient was also responsible for providing all training, dosimetry and environmental monitoring for the site.

Stark County, Ohio (Confidential Client)

Solutient personnel performed the dismantling of a former tube mill without adversely impacting the normal plant operations in contiguous work cells. Production equipment, concrete floors and sub-grade soils were PCB-contaminated, resulting from historical use of PCB-containing hydraulic fluids. Site activities included waste repackaging, decontamination and dismantling of equipment, excavation, containerization, transportation and disposal of liquids, sludges and solids. Written permission was obtained from the USEPA Region V for recycling via melting of low-level PCB-contaminated metals utilizing the Client's electric arc furnace.

The Timken Company

Solutient provided First-Responder services involving a cesium source melt at this steel-making facility. Cesium contamination was spread throughout the bag house and stacks resulting in a multi-million dollar cleanup. Led by GTS Duratek, the prime contractor, Solutient was one of the first responder's onsite and played a lead role in providing project-start HAZWOPER training to over 180 workers.

Solutient provided key supervisory and technician personnel on the project and supplied the site with mobile laboratory equipment, i.e.; multi-channel analyzer and alpha-beta counter. Solutient provided oversight of packaging and shipment of radioactive waste material, and assisted the prime contractor with the preparation of the final report and approval process with the State. When major decontamination crews were demobilized, Solutient remained onsite and continues to provide training to Timken personnel as well as other health physics support. Solutient has been selected as the primary Corporate Radiological Advisory Group for all matters involving radiological site safety.

Key Personnel

Steven M. Pocock President / CEO

With over 20 years of experience in program management and business operations, Mr. Pocock provides all management and development oversight for Solutient. Additional responsibilities include the development of all business plans and accompanying documentation, preparation of cost estimates, proposals, and project management documentation for government and commercial projects. He is one of the founders of the company and was instrumental in the startup and licensing of Solutient.

Mr. Pocock has managed several complex remediation projects while with Solutient and Aerojet Ordnance Tennessee, where he served as Senior Program Manager for Aerojet's Environmental Services and Tungsten Manufacturing Business. Major remediation projects include: Depleted Uranium remediation and removal from test sites in Socorro, NM and Chino Hills, CA, equipment decontamination at Oak Ridge, TN, Fernald, OH, and Vicksburg, MS, and facilities decontamination and demolition at Ionia, MI, Honolulu, HI, Los Angeles, CA, and Jonesborough, TN. Previous positions held include Program Manager for Facilities and Metals Programs and ISO 9000 Overview Team Leader while at Aerojet Ordnance Tennessee, and Accounting Manager, Financial Analyst, and Program Control Administrator while at Raytheon Corporation.

Dell Reuss Operations Manager

Mr. Reuss has over 22 years of experience in the management of radioactive materials. At Solutient, he is responsible for the preparation of technical specifications and engineering cost estimates for projects including decontamination, demolition, and facility restoration, remediation of radioactive waste materials, and management of all field operations. Mr. Reuss verifies that cleanup projects comply with the standards and requirements set forth by the client, and federal, state, and local agencies. He provides oversight for the characterization, handling, transportation and subsequent disposal of radioactive wastes. Mr. Reuss has manifested and shipped over 10 million ft³ of radioactive and mixed waste to Barnwell, Hanford, and Envirocare. He is also one of the founders of the company and was instrumental in the startup and operation of Solutient.

While at Aerojet Ordnance Tennessee, Mr. Reuss was responsible for the development and implementation of Depleted Uranium remediation programs. He was directly responsible for operations of on-site decontamination programs, radioactive waste packaging, and transportation of radioactive waste, water treatment technologies, and hazardous waste training for site personnel. He also managed several off site decontamination projects. Major remediation projects include: the decommissioning of a 50,000 SF Depleted Uranium manufacturing facility, including removal of sub grade tanks, pipes, and sewers, the closure of an evaporation pond containing depleted uranium and thorium waste.

Brad Squibb
Radiation Safety Officer

Mr. Squibb has over 27 years of experience working in the nuclear industry. As the Corporate Radiation Safety Officer, he is responsible for oversight and maintenance the company's Radioactive Materials Licenses in Ohio and California. He provides guidance, direction and training to employees and clients on regulatory issues pertaining to the licenses, as well as emergency response training. As a Certified Waste Broker for the DOD and DOE, he has shipped over 10 million pounds of radioactive and mixed waste to Barnwell, Hanford, Waste Control Specialists, and Envirocare.

Service as the on-site Project Manager for several large-scale remediation projects, Mr. Squibb provides technical and analytical evaluation, and regulatory interpretation. He coordinates waste profiling and shipping activities with the various disposal sites. He is responsible for the operation and management of the Solutient Technologies Tennessee office. Mr. Squibb has provided regulatory licensing, waste characterization and profiling, project management, training and waste management for Solutient Technologies, GTS Duratek, Bechtel Jacobs, Parsons, Aerojet, URS Corporation and other large companies within the industry. Mr. Squibb has served on several committees dealing with radiation safety and works closely with state and federal regulators and clients to provide technical expertise on issues of concern within the industry. Mr. Squibb is the author of several technical papers published while serving as the Secretary of the International Society of Respiratory Protection (ISRP).

David E. Bernhardt
CHP, Assistant Radiation Safety Officer

Mr. Bernhardt has over 38 years of experience in the field of radiation health and safety. He has served as Project Manager and Principal Investigator for environmental pathways modeling and risk assessments of sites contaminated with radioactive and chemical substances, decommissioning and decontamination (D&D), and characterization of contamination on sites. D&D and site characterizations have included preparing license documents, D&D Reports, performing radiation surveys and sampling to certify sites for unrestricted use and termination of license, preparing shipping documentation for transportation of mixed waste, and providing oversight of radioactive materials and waste shipments. Mr. Bernhardt has also prepared bioassay programs and dose assessments for several clients and has served as Radiation Safety Officer on numerous projects. He has also prepared radioactive materials licenses and established radioactive material guidelines at several sites, as well as serving as an expert witness in support of remediation projects.

Leslie W. Cole**CHP, Assistant Radiation Safety Officer**

Mr. Cole has more than 37 years of experience in applied health physics and environmental health physics with specific emphasis in environmental sampling, analysis and data evaluation, health physics and safety program evaluations, radiological and mixed waste assessment and uranium health physics. He is a past Director of Environmental Health and Safety at a uranium metal fabrication facility and is also a member of the NCRP Task Group developing national recommendations for handling uranium. He has served as a Radiation Safety Officer for a major decontamination facility that processes material from nuclear power plants. He has also served as a Health Physics Team Leader in an Environmental Radiological Assessment Program.

Raymond E. Holmes, Ph. D**CHP, Chief Scientist**

Raymond E. Holmes is a hands-on engineer and scientist with more than 30 years of international experience in the determination of health risks and the environmental impact of chemical and nuclear pollution, and in the practice of optimal remediation. The first twenty years, based in Europe, encompassed a comprehensive range of academic, industrial and government applications. Residency in the USA in 1980 facilitated senior technical management positions and consultant appointments to a wide range of national and international environmental corporations.

Jeffrey C. Hollaway**Project Manager**

Mr. Hollaway has over 10 years experience as a Project Manager and Radiological Technician where he has managed various radiological decontamination, remediation and decommissioning projects throughout the United States and Canada. He is proficient at managing site assessments, characterizations, and decontamination activities including the free release of site material. As a Certified Waste Broker, Mr. Hollaway routinely provides radioactive waste packaging and shipping services, and manages the implementation of radiological health and safety procedures. Project Management responsibilities include scheduling, project cost control, and overall project coordination, completion and report generation.

Michael Paessun, CHMM
Business Development Manager

Mr. Paessun has more than 25 years of experience in hazardous and radioactive materials management, environmental construction and remediation services. He has extensive experience managing environmental analytical programs particularly as they relate to the Department of Energy, US Army Corps of Engineers, and private industry. He has managed various remediation programs including facility decontaminations, environmental site remediation, groundwater monitoring programs, and emergency planning services. Mr. Paessun is a Master Level Certified Hazardous Materials Manager (CHMM), and founding President of the Northeast Ohio Chapter of Hazardous Materials Managers (NEOCHMM). He is a member of the Academy of Hazardous Materials Managers (ACHMM) and the Health Physics Society (HPS).

Randy Farneth
Corporate Account Manager

Mr. Farneth has more than 20 years of experience in the environmental / construction services profession. At Solutient, he is tasked with responsibility for business development, relying on his ability to effectively communicate with and properly interpret the needs of corporate environmental engineers, consulting engineers, economic development directors, regulators, and environmental attorney. His planning thoroughness and common sense approach to project implementation reflects itself in his ability to balance the goals of the project with the perceived needs of his Client. He brings to Solutient an accomplished background in site project management, resource allocation and client responsiveness. Project experience includes RCRA facility closures, NRC facility decommissioning, TSCA and RCRA site remediation and restoration, selective dismantling, facilities decontamination, waste beneficiation and minimization, UST closures, and AST installations.

Radioactive Materials Licenses

State

License Number

Ohio
California

03219770000
6759-19