
JULIO A. NUNO, REPA, CESCO

Education

MS – Environmental Engineering, University of Southern California, 1982
BS – Biological Sciences, University of Southern California, 1979

Professional Licenses/Certifications

Registered Environmental Property Assessor (REPA), National Registry of Environmental Professionals (No. 443198)
Certified Environmental and Safety Compliance Officer (CESCO), National Registry of Environmental Professionals (No. 265109)

Professional Affiliations

Water Environment Federation
California Water Environment Association
National Groundwater Association

Professional Experience

Mr. Nuno has over 32 years of environmental services experience, all with SCS, and extensive expertise in property evaluation and due diligence; site assessment, investigation, and remediation; underground storage tank (UST) assessment, upgrading, removal, and leakage cleanup; and hazardous waste management. He works extensively with regulatory agencies, fully understands regulations pertaining to petroleum hydrocarbons and hazardous waste, and has worked on numerous projects associated with real estate transactions to assess the potential for releases, characterize releases of contaminants to soil, soil vapor, and groundwater, implement remedial measures, and develop cost estimates for assessing and mitigating impacts. An SCS Vice President responsible for Environmental Services in Southern California and Nevada, Mr. Nuno has directed SCS's contributions to a number of major projects, including construction of the Staples Center and the Phoenix Award-winning Chesterfield Square project, both in Los Angeles, CA.

A summary of Mr. Nuno's project experience is provided below.

Hazardous Waste/Materials Management

Project Manager for closure of an ordnance production and ramjet test facility, Van Nuys, CA.

Project involved closure of a facility that contained Resource Conservation and Recovery Act (RCRA) hazardous waste management units. Closure activities included implementing a plan approved by the California Environmental Protection Agency (CEPA) and the Department of Toxic Substances Control (DTSC), conducting an inventory and sampling various containers of hazardous materials, preparing a preliminary site assessment, conducting an investigation of former underground tanks and hazardous materials storage areas, providing asbestos management services, installing/monitoring groundwater wells, and remediating impacted areas. Mr. Nuno served as the primary contact for the DTSC and SCS's client.

Managed a 2-year multiple assignment contract to provide environmental services to the Port of Los Angeles. Projects included preliminary site assessments of numerous properties scheduled for acquisition by the Port, implementation of subsurface investigations for two closed shipyards, development of a sampling plan and collection of surface soil samples from property used for the storage of various hazardous materials, collection and analysis of samples from building materials for asbestos, and collection and analysis of samples from creosote wharf pilings to evaluate disposal options. Mr. Nuno's responsibilities included coordinating site activities, interfacing with Port personnel, reviewing project submittals, preparation of monthly progress reports, management of subcontractors, and interfacing with regulatory agencies.

Due diligence assessments of properties prior to acquisition, Southern California. Mr. Nuno has completed various due diligence assessments of properties prior to acquisition by real estate developers, City Redevelopment Agencies, corporations, non-profit entities, and private parties. Projects have included Phase I assessments that meet federal All Appropriate Investigation (AAI) regulations and ASTM standards, inspections for asbestos and lead-based paint, Phase II investigations, preparation of abatement and remediation cost estimates, and regulatory agency coordination. On behalf of the City of Pico Rivera, Mr. Nuno served as the Project Manager for the first closure issued by the Los Angeles Regional Water Quality Control Board (RWQCB) under the Polanco Bill.

Regulatory compliance assessment of a manufacturing facility, Bell, CA. Evaluation of facility operations was conducted to determine compliance with environmental regulations, including materials management, permitting, and maintenance of records. A report was prepared that summarized the applicable regulations and provided recommendations.

Managed a multi-year contract for environmental services at the Long Beach Naval Shipyard and Terminal Island Naval Complex. Projects completed under the contract included preparation of a hazardous materials Spill Prevention Control and Countermeasures (SPCC) Plan, evaluation of wastewater discharges from industrial sources, preparation of a closure plan for a permitted hazardous waste storage facility, design of three hazardous waste staging facilities, and implementation of a site closure investigation.

Project to determine whether impoundment ponds used for the treatment of wastewater generated during operations involved in explosives formulation and packing should be permitted as hazardous waste treatment facilities, Naval Weapons Center, China Lake, CA. This project, completed at a military facility, involved interviewing personnel familiar with operations, collecting wastewater and sediment from the impoundments for subsequent analysis per regulatory requirements, and presenting results in a final written report.

Hazardous waste/materials management program for the Nevada Department of Transportation. Visits were made to each field maintenance station and major maintenance stations located throughout the state to determine the types of hazardous materials used, and methods of handling and disposal. The final report contained (1) suggestions for improving hazardous waste/materials management practices; (2) a policy document for the hazardous materials; and (3) a training program for personnel involved in hazardous waste management.

Guidance to the California Department of Health Services in performing and implementing an audit program for facilities generating hazardous wastes. The objective of the audits was to

evaluate present waste/materials management practices and offer recommendations that would reduce the volume of wastes generated. Recommendations were evaluated on the basis of cost effectiveness and ease of implementation. Audit programs were developed for three industries: the paint and body segment of the automotive repair industry, the marine shipyard maintenance and repair industry, and the precious metals recovery industry. Mr. Nuno participated in many of the facility audits and prepared portions of the reports submitted to the client.

Inventory of oil-filled electrical equipment at properties owned by the State of California to determine if this equipment contains polychlorinated biphenyl (PCB). Project consisted of collecting information and determining potential pathways and receptors in the event that a failure had occurred. Mr. Nuno's role on this project was to visit facilities throughout the state, identify electrical equipment that may contain PCB's and inventory that equipment.

Preparation of SPCC Plans. Mr. Nuno has directed and managed several projects that have involved preparation of SPCC Plans, including several at container facilities within the Port of Long Beach, an airship operation in Carson, a printing operation, and an aerospace facility at the Van Nuys Airport. Plans were prepared in accordance with federal regulations.

Second Party Review of Environmental Impact Report (EIR) for Proposed Intermodal Facility.

As part of a review prior to submittal for public evaluation, Mr. Nuno reviewed sections of the EIR pertaining to Hazards and Hazardous Materials. A critical review was conducted, with comments provided for consideration as part of the final draft document.

Independent Review of Reports, Various Locations. Mr. Nuno has been retained on several occasions to review documents and provide an opinion regarding those documents. Clients have included the City of El Monte, City of Buena Park, Retirement Housing Foundation, Doerken Properties, and Olive Branch Development.

Porter Ranch Dust Monitoring. During grading activities for a major residential development, notices of violation were issued to the grading contractor by the South Coast Air Quality Management District (AQMD). Mr. Nuno's role on this project consisted of attending meetings with the AQMD, preparing a dust mitigation plan, and coordinating staff to provide dust monitoring during grading.

Site Assessment and Remediation

For the Staples Center/LA Live in Los Angeles, served as Project Director for assessment and cleanup of properties acquired as part of the support area (parking lots, future hotels, and other support operations). The project included Phase I Environmental Site Assessments (ESAs) of properties on several blocks surrounding the center, implementation of subsurface investigations to assess potential contaminants from past on-site operations to soil and groundwater, risk evaluation and negotiation of cleanup levels with regulatory agencies, and implementation and oversight during remediation. Due to the Staples Center's construction schedule, SCS's work was completed on an expedited basis.

Former Refinery, Santa Fe Springs, CA. Mr. Nuno was the principal investigator in advance of a real estate transaction that involved a former refinery. Mr. Nuno reviewed previous investigative reports and a remedial action plan (RAP) for completeness, provided remediation recommendations based on available data, and prepared cost estimates for site development.

City of Irwindale, CA. A Phase II investigation was conducted concerning a parcel of land proposed for residential development that had historical uses that may have resulted in releases of hazardous materials. A proposed investigation approach was developed by Mr. Nuno that assessed soil and soil vapor. Wipe samples were also collected in one building that had been reported as a clandestine drug laboratory.

Due Diligence and Permitting for a Nationwide Building Materials Manufacturer, various locations in the U.S. and Canada. Mr. Nuno served as the primary interface between our client and SCS staff within several SCS offices conducting Phase I ESAs on manufacturing facilities throughout the U.S. and Canada. Mr. Nuno developed project budgets, coordinated SCS staff efforts, reported findings, and served as principal reviewer for deliverables.

City of El Monte Gateway project, El Monte, CA. This project, completed for the City of El Monte, consisted of initial studies in preparation for development of 14 acres used by the City's Public Works Yard, a portion of which was a former burn dump. Mr. Nuno was involved in the review of previous documents, working with regulatory agencies to obtain necessary approvals for the proposed development, and interfacing with the site developers. Regulatory involvement included the DTSC, Los Angeles County Local Enforcement Agency (LEA), CalRecycle, and South Coast Air Quality Control Management District (AQCMD). As Project Director, Mr. Nuno reviewed previous environmental investigations, prepared a Workplan for additional investigation and implementation, including a cap for lead-impacted soils. During development, Mr. Nuno provided consulting services to the developer of the site, reviewed analytical data for soil samples collected during excavation for re-compaction, and interfaced with DTSC.

Preparation of a Remedial Action Plan (RAP) and Remedial Design Documents for the Los Angeles Unified School District (LAUSD) South Region Elementary School No. 6. Mr. Nuno served as the principal contact for preparation of a RAP and remedial design documents. The documents were completed to address requirements of the DTSC and were approved for implementation. The design included excavation of soils impacted by pesticides, petroleum hydrocarbons, and volatile organic compounds (VOCs), and in-situ remediation of VOC-impacted soil using vapor extraction.

Malibu Civic Center, Limited Phase I ESA for Proposed Wastewater Treatment Facility, Malibu, CA. Mr. Nuno served as the Project Director for the assessment of a proposed wastewater treatment facility in Malibu, CA. The assessment included an area approximately 1.15 by 2.13 miles, and consisted of a proposed project area with a Wastewater Treatment Plant (WTP), two injection well areas, six pump stations, and numerous piping runs within city streets. For the Limited Phase I ESA, the WTP, injection well areas, and pump station areas were inspected to identify possible recognized environmental conditions. Historical review was conducted for each of the project areas. A database search of known sites that have reported releases was also conducted for the project area. Potential recognized environmental conditions within the project area (i.e., leaking USTs, solvent use, dry cleaners, other release sites) were identified in the final report.

Due Diligence associated with acquisitions of the Los Angeles Dodgers baseball organization, Los Angeles, CA and Vero Beach, FL. Mr. Nuno was responsible for coordinating assessments of Dodger Stadium in Los Angeles and the training facility in Vero Beach, FL, initially as part of

the acquisition by Fox Entertainment Group and again when acquired by Frank McCourt. The assessments included Phase I ESAs, lead-based paint surveys, and inspections for asbestos-containing materials. Subsurface investigations of certain areas of both facilities were also completed under his direction.

Investigations and remediation of former dry cleaning facilities, Torrance, Stanton, and La Verne, CA. Investigations have been completed at numerous active and former dry cleaning facilities to assess the potential for releases of solvents. Investigations have consisted of soil vapor assessments, collection of bulk soil samples, and groundwater monitoring. Additional evaluations have been completed to define the extent of the plume and obtain information to evaluate remedial alternatives. Implemented remedial measures have included excavation, vapor extraction, monitored natural attenuation, and risk management. Contractors were retained to implement portions of the remediation, and Mr. Nuno reviewed submitted bids as well as interacted with the contractors to ensure that work was completed in accordance with bid requirements. Remediation efforts were complicated since structures overlying the impacted areas were to remain in place.

Remedial investigation, groundwater well installation and monitoring, and evaluation of mitigation measures for a former refinery in Central California. Mr. Nuno served as Project Manager for the site investigation and was responsible for coordination of site activities, interpretation of analytical data, and interfacing with SCS's client and regulatory agency personnel.

Naval Assessment and Control of Installation Pollutants program conducted at 16 Navy and Marine Corps facilities, San Diego, CA. As part of the Department of Defense (DOD) installation restoration program, potentially contaminated sites resulting from the past use, storage, handling, and disposal of hazardous materials were identified at each of the 16 facilities that were assessed under this program. The project consisted of the review of archival and base records, interviews with long-term or retired base personnel, conducting on-site inspections/surveys, and writing a final written report.

Former Miller Way Landfill closure and removal of soil stockpile from former gun range, South Gate, CA. On behalf of the City of South Gate, Mr. Nuno provided assistance with the closure of a former inert refuse landfill, which included interaction with the Los Angeles RWQCB, preparation of a grading plan for the facility, and providing quality assurance as part of the grading process and installation of drainage structures. Following an inspection by the DTSC, an enforcement order was issued to remove a stockpile of soil contaminated with lead. Under Mr. Nuno's direction, the soil was characterized and disposed of in a cost-effective manner. Mr. Nuno interfaced with DTSC personnel throughout the program. A report was submitted to the DTSC that led to issuance of a no further action letter regarding these soils.

Supplemental site investigation and preparation of a health risk assessment for former industrial zinc plating facility, Long Beach, CA. A removal action was completed at this facility by the Environmental Protection Agency (EPA) after the facility was abandoned. SCS reviewed available reports for the facility, initiated discussions regarding the site with the DTSC, prepared a work plan for additional investigation in accordance with the corrective action agreement, and implemented the investigation that included collection and analysis of soil, soil vapor (subslab and subsoil), indoor air, and groundwater samples. Data collected were used to prepare a health risk assessment submitted to the DTSC, which led to commercial redevelopment approval.

Investigation and Abatement of Pesticide-Impacted Soil, Oxnard, CA. In response to recommendations within a Phase I Environmental Assessment and Soil Sampling report prepared by another consultant for a property proposed for residential development, Mr. Nuno worked with the Ventura County Environmental Health Department (EHD) to develop an abatement approach for elevated concentrations of toxaphene detected in the soil. Based on the information provided, closure was issued by the EHD.

Methane Gas Assessments – Los Angeles, Signal Hill, Long Beach, and Santa Fe Springs, CA. In order to assess potential hazards associated with development within former and existing oil field areas, investigations were conducted to address local requirements and determine protection measures that may be required as part of existing or proposed developments. Investigations consisted of installing several wells, monitoring to assess concentrations of combustible gases, and preparing reports that provided conclusions and recommendations based on the data.

Proposed Redevelopment, Vermont Avenue, Los Angeles, CA. In order to evaluate a property proposed for subterranean construction, Mr. Nuno developed an approach to investigate potential concerns associated with past on-site and off-site uses, which included former automotive repair. The investigation also included a methane gas investigation in accordance with City of Los Angeles requirements. Based on the results of the investigation, regulatory concurrence was received from the Los Angeles County Fire Department, Site Mitigation Unit.

Phase I ESA and Site Characterization, Canoga Park, CA. Available documentation indicated that a portion of a building was used as a dry cleaner. A soil vapor investigation indicated the presence of tetrachloroethylene (PCE) in soil. Assessments of soil vapor, soil, and groundwater were conducted to more fully characterize the extent of the release. In addition, indoor air sampling was conducted to assess the potential for PCE migration into the building.

Site Assessments, Oil and Gas Industry, Central Coast and Bakersfield, CA. Mr. Nuno has been involved in conducting initial assessments and subsurface investigations of oil fields in the Central Coast and Bakersfield areas. The initial assessments included a site inspection and evaluation of background information, including historical aerial photographs to identify potential release areas. Investigations were conducted to assess the potential for releases.

Underground Storage Tanks

University of California, Los Angeles (UCLA). For several years, Mr. Nuno has assisted UCLA in complying with applicable federal, state, and local regulations for USTs throughout the campus. Services provided have included inspections, reviews of existing as-built drawings, coordination of testing, preparation of plans for upgrades or modifications, assisting with plan checks, interfacing with regulatory agencies, conducting sampling, preparation of work plans and closure reports, and providing construction quality assurance (CQA).

City of Buena Park Auto Center, Buena Park, CA. As part of the acquisition of properties that would comprise the Auto Center, SCS completed several Phase I Assessments and Phase II Investigations. One of the properties assessed was determined to have been a former gasoline service station that had impacted both soil and groundwater. Investigations of soil and groundwater were completed under Mr. Nuno's direction and a RAP was submitted for the mitigation of fuel

hydrocarbons. Groundwater monitoring was conducted on a semi-annual basis through cleanup. Based on this investigation, a transaction was structured for the purchase of the property.

City of South Gate Department of Public Works, South Gate, CA. Following failed SB 989 tests of fueling system and emergency USTs, evaluations of the existing installations were conducted to identify the necessary upgrades. As Project Manager, Mr. Nuno interfaced with SCS's client and regulatory agency personnel for several projects that entailed providing recommendations for upgrading underground tank installations, preparing and reviewing plans and specifications, providing assistance during the bidding process, conducting oversight during installation, collecting soil samples as part of closures, and preparing closure reports.

Retirement Housing Foundation, Angelus Plaza, Los Angeles. As follow-up to a Phase I ESA completed on this property, an investigation was completed to assess the potential for releases of fuel from underground tank systems on the property. Borings were drilled adjacent to the underground tanks and pipelines. Subsequent assistance was provided in evaluating alternatives for replacing one of the underground tanks.

Investigation and remediation of soil and groundwater impacted as a result of release from a UST, Santa Fe Springs, CA. This project consisted of characterizing soil and groundwater with the oversight of the Los Angeles County Department of Public Works and RWQCB. A vapor extraction remediation system was installed to mitigate gasoline-impacted soil. Throughout the remediation effort, groundwater was monitored. Costs were reimbursed under the California Underground Tank Cleanup Fund, requiring all work and associated costs to be reviewed by fund personnel.

Evaluation of alternatives for mitigation of soil contamination from leaking USTs at Los Angeles International Airport (LAX), CA. The evaluated alternatives included excavation and on-site treatment, excavation and hauling to a disposal site, vapor extraction, and no action. Alternatives were evaluated in terms of ease of implementation, regulatory constraints, costs, duration of treatment, and other applicable factors.

RHF Bixby Tower investigation and closure, Long Beach, CA. Available information indicated that a portion of the property occupied by Bixby Tower was a former service station with USTs. A subsurface investigation indicated the presence of low concentrations of petroleum hydrocarbons. Data was submitted to the Long Beach Health Department for review. Based on the data, no further action was issued by the Health Department.

Expert Witness/Litigation Support

Mr. Nuno has provided litigation support on various projects, a representative sampling of which is provided below.

- In support of an eminent domain action to gain access to a property for investigation, Mr. Nuno provided court testimony that included an explanation of the rationale for the investigation, a description of what would be done on site, the amount of time required for the investigation, and how the results would be used. As part of this project, Mr. Nuno appeared in court on four separate occasions.

- Served as an expert witness and provided deposition testimony regarding investigation and remedial activities conducted on a property in Los Angeles County. Soil and groundwater on a property taken through eminent domain by a redevelopment agency had been impacted by a release of fuel hydrocarbons. Mr. Nuno provided testimony regarding the investigation that had been conducted by SCS and the applicability of regulatory requirements to the site. He also critiqued reports prepared by the plaintiff's expert witness.
- Served as an expert witness for a partnership involved in reorganization. Mr. Nuno's involvement regarded mitigation of contaminants on a developed property owned by the partnership, which was formerly utilized for oil production. Mr. Nuno reviewed investigations conducted on the site by others and provided realistic cost estimates for mitigating petroleum hydrocarbons identified in soil on the site.
- On behalf of a defendant that sold several properties throughout Southern California that contained USTs, Mr. Nuno reviewed investigation reports and provided a separate assessment of remedial measures which would be required at each site. Based on this evaluation, a settlement was negotiated.
- For a major manufacturing facility in Silicon Valley, Mr. Nuno evaluated information for a remedial investigation and cleanup action conducted as a result of a release from an aboveground tank containing chlorinated solvents. An opinion was provided regarding the appropriateness of measures taken to investigate and prevent the off-site migration of contaminants.
- Mr. Nuno served as Project Manager for an investigation conducted on a property that had been impacted by oil field operations. He interfaced with legal counsel and assisted SCS's expert witness prepare for deposition and trial testimony.

Mr. Nuno has managed numerous preliminary site assessments and investigations conducted on behalf of law firms. In many cases, the work conducted by SCS formed the basis for negotiating the sale of real property. Mr. Nuno has been involved in meetings with legal counsel of sellers and purchasers to discuss findings and provide opinions of potential liabilities associated with properties.

Publications and Presentations

Nuno, J. A. Site Characterization. American Society of Civil Engineering National Conference on Environmental and Pipeline Engineering. July 2000.

Nuno, J. A., and T. Dong. Contracting with Environmental Consultants. California Redevelopment Association Journal. September 1994.

Dong, T., and J. A. Nuno. Phased Approach to Due Diligence Environmental Assessment. California Redevelopment Association Journal. August 1994.

Nuno, J. A., Sullivan, P. S., and Lister, K. H. Project Plan Development, Site Characterization, Risk Assessment, and Development and Evaluation of Remedial Action Alternatives, American

Society of Civil Engineers/Canadian Society of Civil Engineers Environmental Engineering Conference, 1997.

Devinny, J. S., J. April, D. F. Buss, C. Johnson, K. Khan, K. H. Lister, J. A. Nuno, P. S. Sullivan, M. Tagoe, and D. Williams. The ASCE Draft Environmental Site Remediation Manual. Practice Periodical of Hazardous, Toxic, and Radioactive Waste Management. Volume 1, Number 3. July 1997.