

JULIO A. NUNO, REPA, CESCO

Education

MS – Environmental Engineering, University of Southern California, 1982

BS – Biological Sciences, University of Southern California, 1979



Professional Licenses

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 37 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. As SCS Senior Vice President responsible for Environmental Services in Southern California, Arizona, 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.

Hazardous Waste/Materials Management

Project Manager for closure of an ordnance production and ramjet test facility, Van Nuys, CA. The project involved closure of a facility containing 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 Department of Toxic Substances Control (DTSC), conducting inventory while 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, CA. Projects completed under this contract included preliminary site assessments of numerous properties scheduled for acquisition by the Port of Los Angeles (Port), the implementation

of subsurface investigations for two closed shipyards, development of a sampling plan and collection of surface soil samples from the property storing 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, preparing monthly progress reports, managing subcontractors, and interfacing with regulatory agencies.

Regulatory compliance assessment of a manufacturing facility, Bell, CA. This project included conducting facility operations to determine compliance with environmental regulations, including materials management, permitting, and maintenance of records. A report was prepared summarizing the applicable regulations while providing recommendations.

Managed a multi-year contract for environmental services at the Long Beach Naval Shipyard and Terminal Island Naval Complex. Projects completed under this contract included the 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, the design of three hazardous waste staging facilities, and the 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. The objective for this project was to determine whether the impoundment ponds, used for the treatment of wastewater generated during operations, were exposed to explosive formulations, which required permitting the Naval Weapons Center as a hazardous waste treatment facility. The project was completed on site at the military facility and involved interviewing personnel familiar with the operations. Per regulatory requirements, the collection of wastewater and sediment from the impoundments was used for subsequent analysis, which was presented in a final written report submitted to the client.

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, along with observing the 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 audits were conducted to evaluate present waste/materials management practices and to propose recommendations to reduce the volume of wastes being 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 contained polychlorinated biphenyl (PCB). State of California-owned properties were evaluated in a housing inventory of oil-filled electrical equipment that potentially contained PCB. To determine the outcome in an event of equipment failure, SCS assessed potential pathways and receptors that could contribute to the failure. Mr. Nuno's role on this project was to

visit facilities throughout the state, identify electrical equipment that could contain PCBs, and inventory the equipment.

Preparation of SPCC Plans. Mr. Nuno has directed and managed several projects involving preparation of SPCC Plans, including several 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 met or exceeded 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 detailed review was conducted, with comments provided for consideration as part of the final draft document.

Independent Review of Reports, Various Locations. Mr. Nuno is continuously requested to review documents and provide his professional opinion regarding complex cases. Clients include 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 (SCAQMD). Mr. Nuno's role on this project consisted of attending meetings with the SCAQMD, preparing a dust mitigation plan, and coordinating staff to provide dust monitoring during grading.

Due Diligence for Property Transfers

Mr. Nuno has completed and has been involved in several hundred 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 meeting federal All Appropriate Investigation (AAI) regulations and the American Society for Testing and Materials (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.

Former Boeing C-17 Facility. Mr. Nuno served as leader of a team that assessed the former Boeing C-17 facility in Long Beach. The assessment included evaluation of several comprehensive documents completed as part of the assessment and closure of the former military aircraft manufacturing facility. The efforts resulted in the successful transfer of real estate to our client.

Former Landfill Sites. Mr. Nuno has completed Phase I Environmental Site Assessments (ESAs) of properties used in the past for disposal of waste materials and operated as landfills. These facilities have been located throughout Southern California.

Site Assessment and Remediation

For 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). This project included Phase I ESAs of properties on several blocks surrounding the Staples 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 prior to a real estate transaction involving a former refinery. Mr. Nuno was responsible for reviewing previous investigative reports, including a Remedial Action Plan (RAP) for completeness, and for providing remediation recommendations based on available data, which were implemented in cost estimates for the site development.

City of Irwindale, CA. A residential development was proposed for a parcel of land associated with historical uses resulting in potential hazardous material releases. SCS conducted a Phase II investigation with an approach developed by Mr. Nuno assessing soil and soil vapor at the site. Wipe samples were also collected in a building on site that was 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 has served as the primary interface between clients and SCS staff within several SCS offices conducting Phase I ESAs on manufacturing facilities throughout the U.S. and Canada. He has developed project budgets, coordinated SCS staff efforts, submitted investigations, and served as Principal Reviewer for deliverables.

City of El Monte Gateway project, El Monte, CA. The City of El Monte planned to expand its Public Works Yard on 14 acres of what used to be a former burn dump. In preparation for this development, Mr. Nuno reviewed previous environmental investigations while collaborating with site developers and regulatory agencies to obtain necessary approvals for the proposed development. Regulatory agency 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 prepared a work plan for an additional investigation and implementation, which included a cap for lead-impacted soils. During development, he reviewed analytical data from soil samples collected during excavation, and provided consulting services to site developers while interfacing with the DTSC. As a result, a Remedial Action Completion Report (RACR) was prepared and submitted to DTSC for approval, which later granted development of the site for residential and commercial uses.

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 the preparation of a RAP and remedial design documents. The documents were completed to meet DTSC requirements and 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 Project Director for the assessment of a proposed wastewater treatment facility in Malibu, CA. The assessed area consisted of approximately 1.15 by 2.13 miles of 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 (RECs). Historical review was conducted for each of the project areas. In addition, a database search of known sites with reported releases was conducted. Potential RECs within the project area (i.e., leaking USTs, solvent use, dry cleaners, and other release sites) were identified and reported.

Market Street Development, Long Beach, CA. As part of a pre-acquisition evaluation, Mr. Nuno was involved in the preparation of a Phase I ESA and Phase II investigations to assess potential impacts associated with past oil extraction activities on the site and in the vicinity. In addition, available information indicated that releases from a nearby former service station and dry cleaning facility may have impacted the site. Mr. Nuno developed an investigation approach to assess impacts to the

property, which included collection of soil and soil vapor samples. He also provided recommendations for evaluation and re-abandonment of former oil wells occupying the property.

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 at numerous active and former dry cleaning facilities have been completed to assess the potential for releases of solvents. These investigations 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 to obtain information used in evaluating remedial alternatives. Implemented remedial measures have included excavation, vapor extraction, in situ chemical oxidation, biological enhancement, monitored natural attenuation, and risk management. Permanent overlying structures contributed to the complexity of the remediation efforts. The contractors retained to implement portions of the remediation collaborated with Mr. Nuno, utilizing his expertise to review submitted bids and ensure that work performed was in accordance with bid requirements.

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, which included 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, 16 facilities were identified as potentially contaminated sites resulting from the past use, storage, handling, and disposal of hazardous materials. The project consisted of the review of archival and base records, interviews with long-term or retired base personnel, on-site inspections/surveys, and the submission of a final 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 assisted with the closure of a former inert refuse landfill, which included preparation of a grading plan for the facility, quality assurance as part of the grading process, and installation of drainage structures while maintaining communication with the Los Angeles RWQCB. 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. He interfaced with DTSC personnel throughout the duration of the program. A final report was submitted to DTSC, leading to issuance of a no further action letter regarding the soils.

Supplemental site investigation and preparation of a health risk assessment for former industrial zinc plating facility, Long Beach, CA. A removal action was issued by the U.S. Environmental Protection Agency (EPA) for an abandoned facility. SCS reviewed available reports associated with the facility, initiated discussions 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 (sub-slab and subsoil), indoor air, and groundwater

samples. Data collected was used to prepare a health risk assessment submitted to the DTSC, which resulted in the 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 to determine protection measures potentially required as part of existing or proposed developments. Investigations consisted of installing several wells, monitoring to assess concentrations of combustible gases, and preparing reports to provide conclusions and recommendations analyzed from 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- and off-site uses, which included former automotive repair. The investigations also included surveys for asbestos-containing materials and a methane gas investigation in accordance with City of Los Angeles requirements. In addition, a soil management plan was prepared to provide contingencies for the impacted soil in the event of exposure during construction. 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 revealed the presence of tetrachloroethylene (PCE) in soil. Assessments of soil vapor, soil, and groundwater were conducted to 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 possible releases.

Storage Tanks

Assessment of Storage Tanks Containing Hazardous Waste. Mr. Nuno has been involved in several dozen projects to assess the condition of aboveground tanks used for storing hazardous wastes, including oil and other petroleum wastes, acids, and caustics. These assessments were completed in accordance with regulatory requirements under Title 22 California Code of Regulations 66265.190 through 66265.202.

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 located in Los Angeles, CA. Services provided have included inspections, reviews of existing as-built drawings, coordination of testing, preparation of plans for upgrades or modifications, assistance with plan checks, interfacing with regulatory agencies, sample collection, preparation of work plans and closure reports, and 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 the investigations, a transaction was structured for the purchase of the property.

City of South Gate Department of Public Works, South Gate, CA. Following failed Senate Bill 989 (SB 989) highlighting fueling system tests and emergency USTs, SCS performed evaluations of existing installations to identify the necessary upgrades. As Project Manager, Mr. Nuno interfaced with SCS's client and regulatory agency personnel for several projects 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. Borings were drilled adjacent to the underground tanks and pipelines, subsequently assisting in the evaluation of 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. Groundwater monitoring was conducted throughout the duration of remediation efforts. Costs were reimbursed under the California Underground Tank Cleanup Fund, requiring review of all work and associated costs 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 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 hydro-carbons. Data were submitted to the Long Beach Health Department for review. Based on the data, no further action was issued by the Health Department.

Aboveground Storage Tank Evaluation. Mr. Nuno has been involved in several projects involving the evaluation of aboveground storage tanks used to contain hazardous wastes. The evaluation was conducted in accordance with the California Code of Regulations and included the evaluation of construction materials, compatibility of the tank with materials stored in the tank, corrosion protection, and whether adequate spill protection is available.

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.
- Mr. Nuno 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. He 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.
- Mr. Nuno served as an expert witness for a partnership involved in reorganization. His involvement regarded mitigation of contaminants on a developed property owned by the partnership, which was formerly utilized for oil production. He 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 that 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 in preparation for deposition and trial testimony.
- As part of litigation between a property owner and former tenant, Mr. Nuno was named as an expert witness to opine regarding investigations and adequacy of cleanup conducted to investigate a release from a former dry cleaning facility.
- 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. He 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, Vol. 1, No. 3, July 1997.