DANIEL E. JOHNSON

Education

MS – Environmental Studies, California State University, Fullerton, 1986

BA - Economics, University of California, San Diego, 1982

Specialty Certifications

40-Hour OSHA HAZWOPER (with Annual Updates)

Professional Affiliations, Advisory Boards, and Boards

Air Pollution Control Association (Later Renamed Air and Hazardous Waste Association); Former Director of the San Diego Chapter Board

American Society of Testing and Materials (ASTM), Committee on Environmental Site Assessment (ESA) – E50. Subcommittees: ESA for Commercial Real Estate and Underground Storage Tanks (USTs)

Association of Environmental Professionals

Association of Hazardous Materials Professionals, NOW San Diego Environmental Professionals; San Diego Chapter (Founding President and Member of the Board of Directors)

- California Association of Economic Development Member, Brownfields Committee
- California Redevelopment Association Former Member, Brownfields Committee San Diego Port Tenants Association – Member Environmental Committee
- Certificate Program in Hazardous Materials Management, University of California, San Diego (Former Member of Advisory Board)
- Industrial Environmental Association (IEA) Member Water Committee

Maritime Alliance - Member - Board of Directors

- National Academy of Science, Transportation Research Board (Former Member of the Transportation and Air Quality Committee)
- National Brownfields Association Former Member, California Chapter Executive Committee Pollution Engineering Magazine – Former Member, Editorial Advisory Board

Regional Water Quality Board (RWQCB) - Former Board Member - San Diego Region

San Diego County, Hazardous Materials Management Division, ESA/Mitigation Program, Technical Oversight Steering Committee (Former Member)

Urban Land Institute (ULI) – Board Member, San Diego District Council; Co-chair, Redevelopment and Reuse Product Council

ULI National – Member, Redevelopment and Reuse Product Council

Professional Affiliations, Advisory Boards, and Boards

Department of Toxic Substances Control (DTSC)

U.S. Environmental Protection Agency (EPA) Headquarters and Region 9 U.S. Geological Survey Integrated Waste Management Board State Water Resources Control Board RWQCB – San Diego Region RWQCB – Lahontan Region

RWQCB – Los Angeles Region County of San Diego Department of Environmental Health (DEH) Orange County Health Care Agency (OCHCA) Cal-EPA – Various Agencies

Professional Experience

Environmental Affairs

Mr. Johnson is highly experienced and well versed in environmental affairs. He has managed or been involved with over 1,000 site assessments, including Phase I ESAs, subsurface investigations of chemicals in the vadose and groundwater zones (Phase II), and site remediation, including selection of remedial alternatives for site cleanup. He also has been instrumental in obtaining environmental permits and interfacing with regulatory agencies. He serves as a member of the San Diego RWQCB, and has managed or been involved with close to 75 site closures.

Mr. Johnson has substantial experience managing the planning, organization, mobilization, and execution of projects involving subsurface soil and groundwater assessments, leaking underground storage tank (LUST) sites with RWQCB lead, DTSC sites, UST remediation, chlorinated solvent investigation and remediation, feasibility studies, and site closure.

He has concurrently managed multi-task order teams with rigorous schedules to meet client needs. Projects that Mr. Johnson has managed have included those dealing with such diverse problems as:

- Pesticide contamination in the shallow subsurface.
- Heavy metal contamination in surface and subsurface soils.
- Petroleum hydrocarbon (PHC) contamination in soil and groundwater.
- Chlorinated hydrocarbon contamination in soil and groundwater.
- Methane gas and chlorinated hydrocarbon contamination in the subsurface.
- Friable asbestos in the shallow subsurface soil.

Mr. Johnson is well acquainted with current practices regarding environmental assessments, and has spoken at or chaired numerous conferences on hazardous waste issues related to real estate transactions and Brownfields redevelopment. In addition, he has managed numerous site assessment and subsurface investigation projects, including soil boring and monitoring well programs as well as soil gas and geophysical surveys. He has also managed projects where soil vapor extraction (SVE) and bioremediation technologies were utilized for the remediation of the soil and groundwater. Select projects include:

- On-Call Subsurface Assessment, Monitoring, and Remediation Contract (Three Years), Port of San Diego, Various Sites. Principal-in-Charge.
- On-Call Environmental Assessment, Monitoring, and Remediation Contract, CCDC East Village Redevelopment Area, San Diego, CA. Principal-in-Charge.
- On-Call Environmental Assessment, Monitoring, and Remediation Contract, National City Redevelopment Area, CDC, National City, CA. Principal-in-Charge and QA/QC.
- On-Call Subsurface Investigation, Monitoring, and Remediation Contract, City of San Diego, Various Sites. Principal-in-Charge.

- On-Call Subsurface Assessment, Monitoring, and Remediation Contract, SWDIV NAV FAC ENG COM, Various Locations. Project Manager.
- UST Removal Program, San Diego City Schools, Multiple Sites. Principal-in-Charge.
- Abandoned UST and Leaking UST Programs, Southwest Division Naval Facilities Engineering Command, Various Locations. Project Manager.
- Various Brownfields and LUST Sites, Project Manager and Principal-in-Charge; over 200 Projects in San Diego County.
- Various Phase I ESAs/PEAs/Lead/Asbestos Studies; over 1,000 Projects in San Diego and Seven Western States. Project Manager and Principal-in-Charge.
- NPDES Permitting, Various Point and Non-Point Discharge Projects. San Diego County.
- Chula Vista Jurisdictional Urban Runoff Management Program. Principal-in-Charge.

Mr. Johnson's previous experience includes work for the EPA in Washington, DC. While at the EPA, he was given primary responsibility for the development of national indications of ground- and surface water quality, as well as wastewater sludge, for the Environmental Results Indicators (ERI) project. ERI was given a top priority by the EPA as a way of tracking an agency's progress and more efficiently allocating EPA resources. Mr. Johnson's work was used in a briefing for the Administration of the EPA; he attended as a technical advisor.

Internationally, Mr. Johnson had the opportunity to work for the United Nations Environmental Program (UNEP) in Nairobi, Kenya. While at UNEP, he worked with the global environmental information system known as INFOTERRA, which provided environmental information to 115 nations in 4 languages. His duties included system analysis and clarification. While in Nairobi, he also developed a compendium of information on appropriate technology.

Regionally, Mr. Johnson was actively involved in the development of mobile source and transportation control air pollution regulations at the South Coast Air Quality Management District (SCAQMD), including testimony before hundreds of people at workshops, hearings, and the District Board. He developed a benefit-cost analysis of a proposed air quality regulation which was considered by the South Coast District Board.

Real Estate Risk Management

Mr. Johnson is well known for his expertise in real estate risk management. A seasoned investor with extensive property holdings, Mr. Johnson has developed a wide range of risk management programs, from single assets and one-off transactions to entire portfolios of contaminated properties with market values in excess of \$100,000,000. More recently, he was the Principal Strategist behind "SCS Secure," the SCS program that offers a menu of risk transfer options to clients with environmentally impaired assets. His expertise is summarized below:

- Extensive knowledge of all aspects of real estate investment and development, with an emphasis on industrial product type.
- Developing risk management strategies for "stranded assets" that are owned by a bank or institutional investor, including the use of insurance and guaranteed fixed price remediation programs.

- Intimate knowledge of insurance underwriting for environmentally impaired assets, including different product types, current market availability for different types of insurance products, approximate cost structures, and close working relationships with brokers and underwriters to maximize coverage and minimize premium costs.
- The development of blended risk programs that include both guaranteed fixed price remediation, cost cap or stop loss insurance, and pollution and legal liability insurance.
- The development and underwriting of long-term liability buyout programs associated with impaired assets, or long-term liability associated with institutional controls and 30-year compliance terms.
- Evaluation of existing insurance products to identify policy limits, terms, gaps, and extent of coverage, in conjunction with legal and insurance experts.
- The development and underwriting of guaranteed fixed price remediation (GFPR) programs for multi-million-dollar remediation projects.

An example project includes the development and evaluation of a GFPR program for a \$3 million stranded asset for a real estate holding company. The GFPR program allowed this last property of a portfolio to successfully be sold to an institutional investor.

Expert Witness

Mr. Johnson has served as an expert witness on more than 25 cases, including depositions and testimony at trial.

Specific Project Experience

Lowe Enterprises, Idea 1 Environmental Monitoring, San Diego, CA. As Project Director, Mr. Johnson was responsible for overseeing environmental monitoring during excavation activities to efficiently segregate lead and PHC-impacted soils. He oversaw the assessment of features of concern and supervised the removal of two USTs. Staff conducted stockpile management and confirmation soil sampling, and oversaw health and safety procedures, subcontractor activities, and soil disposal. An on-site mobile laboratory analyzed total petroleum hydrocarbons (TPHs) to delineate PHC-bearing soil in the vicinity of the former USTs. Data from the laboratory were used to guide excavation activities.

AMCAL, ESA and Soil Management Plan (SMP), Pomona, CA. Mr. Johnson was responsible for the oversight of site assessment activities to pre-characterize impacted soil across the site, and prepared a soil management plan that was approved by the Los Angeles County Fire Department (LACoFD). The SMP described, in detail, the extent of impacted soil and procedures to efficiently segregate this soil during excavation activities.

Groundwater Remediation for Former Mobil Station, Chino Hills, CA. This project involved a former retail fueling facility with four USTs containing gasoline and diesel. Ms. Johnson was responsible for overseeing the design and implementation of a groundwater remediation system to inject hydrogen peroxide into the subsurface to remediate impacts from PHCs. Staff obtained regulatory closure for the site by coordinating the well destruction and site recommissioning activities.

Opera Development, ESA and Groundwater Monitoring. Mr. Johnson, as Project Director, was responsible for the oversight and conduct of ESA activities, including drilling, installation, and

sampling of groundwater monitoring wells at two former gasoline stations. Staff collected and interpreted soil and groundwater data, and prepared site assessment reports that covered the various areas investigated at the site and included soil boring lithologic logs, figures, and cross-sections depicting subsurface conditions.

Manchester Financial Group LP, Additional Phase II ESA and Soil Management Plan Preparation for 937 North Harbor Drive, San Diego, CA. Mr. Johnson served as Project Director to redevelop the eight-block Navy Broadway Complex into multiple high-rise buildings, including office, hotel, retail, and park uses, as well as a new Navy building and extensive subterranean parking/improvements. SCS staff has completed extensive historical reviews and Phase II subsurface investigations, and remediation planning work is currently underway, with grading for the Manchester Pacific Gateway project currently anticipated for 2017.

Harman Asset Management, Phase I ESA and Human Health Risk Assessment (HHRA), San Diego, CA. As project Director, Mr. Johnson was responsible for overseeing the completion of ESAs that included design, implementation, and operation of a sub-slab depressurization system (SSDS) for a site occupied by a retail center in San Diego. This included updating the client, using preexisting soil vapor sample data and current air exchange rate measurements at select tenant spaces on the site. These measurements were compared against County of San Diego, DEH, site assessment and mitigation HHRA models.

Brixton Capital, Gasoline Service Station Redevelopment for Retail Buildings, Chula Vista, CA. As Project Director, Mr. Johnson oversaw assessment, remedial planning, and remediation consisting of oversight, segregation, and on-site burial of residual PHC-impacted soils from a former gasoline service station release property redeveloped with new retail buildings.

Phase I, Excavation, and Soil Management Plan for Mercado Del Barrio Development, San Diego, CA. As Project Director, Mr. Johnson was responsible for overseeing environmental consulting and excavation contracting services for the Mercado Del Barrio development, a 7-acre mixed-use development project. During the planning phases of the project, he used information from a Phase I ESA and subsurface investigation to prepare a soil management plan. The plan outlined a strategy for safely reusing soil beneath a building on the site, while protecting public health and the environment. The plan established a protocol for future management of the soil intended for reuse, as well as estimated volume of impacted soil and mitigation criteria. During construction, SCS was responsible for densities, grading, and mass excavation of approximately 75,000 cubic yards of soil, precise grading, and delivery of certified pads, and providing environmental monitoring to verify that materials are properly handled. Specific assignments include perimeter air monitoring, stockpile management, and confirmation soil sampling.

City of Encinitas, Phase I, Subsurface Investigation, Soil Reuse Plan for Encinitas Community Park, Encinitas, CA. Turning a former flower nursery into a community park required a thorough assessment of impacts to soil and groundwater from nursery activities, and alleviating community concerns. Mr. Johnson, as Project Director, assisted in completing a Phase I ESA, subsurface investigation, and soil reuse plan. Working with the City, SCS provided guidance to contractors on how to monitor and suppress dust generated through the demolition of the buildings, handle impacted soil, and limit exposure to workers on the site. Because there were concerns about contamination, Mr. Johnson participated in several public workshops and made presentations at city council meetings. Using information collected during ESA activities, he alleviated these concerns.

City of San Diego, ESA and Remediation for San Diego Central Library, San Diego, CA. Mr. Johnson provided technical oversight during ESA and remediation activities to build the new San Diego Central Library in downtown San Diego. Remediation activities involved excavation of impacted

soil, stockpile management, and characterization along with discrete sampling of in situ soil. Excavated soil was transported under manifest to an appropriate waste disposal facility.

Phase I and Subsurface Investigations for North Embarcadero Visionary Plan, San Diego, CA. Mr. Johnson, as Project Director, completed a Phase I ESA and subsurface investigations for the North Embarcadero Visionary Plan project area. The assessment identified historical land uses that have impacted the area. Appropriately addressing the environmental impacts is critical to protecting public health and the environment, because the planned improvements include "public spaces."

Hazardous Materials Management Plan for Harbor Drive Pedestrian Bridge, San Diego, CA. Mr. Johnson oversaw the preparation of a hazardous materials management plan for the Harbor Drive Pedestrian Bridge. The plan provided a strategy and described procedures for excavating, profiling, transporting, and disposing hazardous materials generated at the site. The plan included an approach that enhanced the construction schedule and minimized cost associated with handling hazardous materials.

Environmental Engineering Services for Marina Gateway Hotel and Marina Development,

National City, CA. Mr. Johnson provided environmental engineering services that addressed the presence of hazardous materials at the Marina Gateway project. He developed a holistic approach that included mitigating hazardous substances and considered ecological criteria, planning requirements, geotechnical issues, and funding options. It was particularly important to address potential impacts to Paradise Marsh, a sensitive environmental habitat, from the releases and cleanup activities. The project received an EPA Phoenix Award.

CALReUSE Statewide Strategic Partner. SCS was on the National Brownfield Association's team as a Strategic Partner for administering the CALReUSE Program. CALReUSE provided funding for Brownfields cleanup that promotes infill redevelopment, particularly residential mixed use, as defined by regional and local use plans. As Project Manager, Mr. Johnson reviewed and scored grant applications; evaluated and recommended projects to the California Pollution Control Finance Authority (CPCFA) for financing; and provided technical assistance to applicants, borrowers and grantees.

Southwest Redevelopment Project Area Community-wide Brownfields Assessment, Chula Vista, CA. SCS completed the Southwest Redevelopment Project Area Community-wide Brownfields Assessment. Mr. Johnson, as Project Director, oversaw the completion of a geographic information system (GIS)-based area-wide inventory; assisted in developing site selection criteria for Phase I ESAs; participated in community outreach activities; and verified compliance with grant requirements. Combining his knowledge of real estate and environmental sciences, he developed site selection criteria based on the potential for redevelopment. The assessment was funded by an EPA Brownfields Community-wide Assessment grant.

City of Corona, Corona Community-Wide Brownfields Assessment, Corona, CA. The City of Corona received two grants from the EPA Brownfields Program to complete a community-wide Brownfields assessment. Mr. Johnson, as Project Director, provided Brownfields redevelopment expertise for completing a GIS area-wide inventory, identified site selection criteria for Phase I ESAs and subsurface investigations, and verified compliance with grant requirements.

Demolition and Remediation for Pearson Ford, San Diego, CA. A mixed-use development was constructed on the former Pearson Ford automobile dealership. Mr. Johnson provided his technical expertise to accurately assess the environmental conditions of the site and develop an approach for demolition, abatement, and remediation activities. A property mitigation plan was prepared and submitted to the San Diego County DEH and subsequently approved. During remediation activities,

he provided solutions to unforeseen situations that maintained the schedule and avoided excessive cost overruns.

San Diego Redevelopment Agency (SDRA) Environmental Consulting Services, San Diego, CA. Mr. Johnson, as Project Director, resolved issues associated with contaminants of concern that are present in redevelopment areas within San Diego neighborhoods on behalf of the SDRA. To meet SDRA's goal of revitalizing neighborhoods and improving economic conditions, Mr. Johnson provided technical assistance to develop end-use driven remediation goals; prepared feasibility cost and determined timing of various cleanup methods; and clarified the impact of monitoring or maintenance requirements for contaminants that may have remained on site subsequent to redevelopment. He assisted SDRA in obtaining a \$400,000 grant from the EPA's Brownfields Program. SCS conducted research on sensitive receptors and possible Brownfields sites in two redevelopment areas; facilitated the public/private partnership; collected data from agency staff for use in the grant proposal; and assisted in preparing the grant proposal.

City of Lemon Grove, Lemon Grove Avenue Realignment, Lemon Grove, CA. As Project Director, Mr. Johnson assisted the City of Lemon Grove in acquiring environmentally impacted property to establish an easement for realigning Lemon Grove Avenue. SCS completed a Phase I ESA and subsurface investigations. The subsurface investigations discovered elevated levels of arsenic. Additional investigations assessed and speciated arsenic in the soil; assessed the presence and concentration of arsenic in soil and groundwater; identified groundwater depth and hydraulic gradient at the site and in the site vicinity; and assessed the leachability of arsenic in selected soil samples. The investigation concluded that elevated levels of arsenic are caused from historical land uses. This information was used to plan for subsequent phases of the roadway realignment project.

San Diego County Water Authority (SDCWA), Environmental Consulting Services, San Diego, CA. Mr. Johnson oversaw ESAs and other environmental consulting services performed by SCS for the SDCWA. Recently, hundreds of acres of vacant land were assessed to obtain additional right of way as part of the San Vicente Reservoir expansion project.

City of San Marcos, Phase I ESAs and Subsurface Investigations for San Marcos Creek Flood Control and Road Improvement, San Marcos, CA. SCS has completed several Phase I ESAs and subsurface investigations as part of acquisition activities for the San Marcos Creek Flood Control and Road Improvement Project. Mr. Johnson was responsible for conducting quality assurance and quality control reviews of the final reports submitted to the City of San Marcos.

City of Poway, Maderas Golf Course, Poway, CA. Sunroad Enterprises proposed installation of two wells at the Maderas Golf course, to diversity their water resources and reduce the need for potable water sources. Mr. Johnson assisted with regulatory agency approvals that included submitting two letters to the City of Poway. The letters outlined the hydrogeologic conditions observed at the golf course, and provided an evaluation of the proposed locations of the new wells relative to features (fracture traces, photolineaments, etc.) documented in the area. The letters submitted to the City concluded that the new wells would not impact off-site test wells. The City agreed with the conclusions presented by SCS, issued the necessary approvals, and two new wells were installed.

East Village Redevelopment Project Area and Petco Park, San Diego, CA. The East Village Redevelopment Area is 26 blocks in downtown San Diego. The area was environmentally impaired from commercial and industrial uses dating back to the late 1800s. Mr. Johnson, as Project Director, was responsible for developing a 35-block area-wide Phase I ESA, completing subsurface investigations, and implementing remediation activities for soil and groundwater contamination. SCS self-performed as general contractor over \$4 million in remediation activities in the East Village Redevelopment Area that included Petco Park, home of the San Diego Padres. Mr. Johnson

managed staff and resources in addition to budget authority. He was responsible for coordinating efforts between the client and stakeholders and for serving as regulatory agency liaison.

Phase I ESA and Subsurface Investigation for Spinnaker Waterfront Hotel. Constructing the Spinnaker Waterfront Hotel required addressing several recognized environmental conditions. Mr. Johnson oversaw the Phase I ESA and subsurface investigation conducted at the site. Based on ESA results, SCS recommended disclosing soil sample results and preparing a property mitigation plan to properly plan for construction. SCS also prepared a conceptual cost estimate to budget for transporting and disposing impacted soil.

City of San Diego, UST Investigation and Remediation Services, San Diego, CA. Mr. Johnson, as Project Manager, managed environmental consulting services for the City of San Diego's UST sites. SCS completed Phase I ESAs, subsurface investigations, SVE surveys, and site conceptual models at 17 locations. This included 7 fire stations, 2 police stations, and Brown Field Airport. There were 36 USTs at the airport and 36 release cases were identified. Mr. Johnson discovered commingled plumes in extremely complex geological conditions, and determined remediation alternatives.

Design, Installation, and Operation of Dual-Phase Extraction System for 15th and Island Free Product Recovery, San Diego, CA. At the corner of 15th and Island in downtown San Diego, light non-aqueous phase liquid (LNAPL) PHCs were present at the site. Mr. Johnson provided technical oversight for the design, installation, and operation of a DPE system used to perform free product recovery. Prior to installing and operating the systems, a work plan was prepared and submitted to the San Diego County DEH for approval. All work was conducted according to the work plan. The system was effective at removing LNAPL from the site and was shut down because free product had been removed to the extent practicable. The site received regulatory agency closure.

Subsurface Investigations for 5th Rock LLC, Hard Rock Hotel, San Diego, CA. For construction of the Hard Rock Hotel to proceed, extensive environmental challenges needed to be resolved. Mr. Johnson worked closely with 5th Rock LLC, the SCS team, and other parties involved in developing a practical approach to demolish, assess, and remediate approximately 80 percent of this city block. The project involved completing subsurface investigations, assisting 5th Rock LLC with the San Diego County DEH Voluntary Assistance Program, and preparing a property mitigation plan. The property mitigation plan had a tight time frame for cleanup of hazardous materials, excavation construction plans, property-specific remediation criteria, and a method for on-site assessment and monitoring using X-ray fluorescence (XRF) or mobile laboratories.

Quality Control Reviews for Action Car Wash, San Diego, CA. Action Car Wash, an automobile wash and detailing facility, had three USTs, fuel dispensers, and pipelines removed from the site in 1994. Mr. Johnson provided technical oversight and conducted quality control reviews on soil and groundwater investigations that assessed the horizontal and vertical extent of PHC-impacted soil and groundwater. Data collected from the subsurface investigation was used to prepare a corrective action plan. DPE was used to extract constituents of concern in the soil and groundwater and to enhance natural attenuation that will accelerate remediation at the site and reduce long-term costs associated with continued monitoring and analysis. The site received regulatory agency closure.

National City Community Development, Education Village Redevelopment Project Area and Harbor District Redevelopment Project Area, National City, CA. The National City Community Development Commission redeveloped two areas: Education Village Redevelopment Project Area and Harbor District Redevelopment Project Area. These areas had extensive environmental impacts from historical land uses. As Project Manager, Mr. Johnson provided technical oversight for Phase I ESAs, preliminary endangerment assessments, subsurface investigations, HHRAs, and remediation planning, design, and construction. He assisted the National City Community Development

Commission in successfully obtaining a \$2 million work grant from the California Integrated Waste Management Board (CIWMB) for remediating a former burn dump.

City of Poway, Environmental Consulting Services for Poway Road Redevelopment Project Area Community-Wide Brownfields Assessment, Poway, CA. SCS provides environmental consulting services to the City of Poway on projects with hazardous material issues. Mr. Johnson, as Project Director, has managed several ESAs and remediation projects, and has provided technical assistance during real estate negotiations. To facilitate revitalizing the Poway Road corridor, he assisted in successfully obtaining a \$200,000 grant from the EPA's Brownfields Program. Funds from the grant were used to complete the Poway Road Redevelopment Project Area Community-wide Brownfields Assessment that included a Phase I ESA along a 2.59-mile road corridor. Mr. Johnson also assisted in preparing quarterly reports on project progress, conducting a screening-level HHRA, preparing a regional conceptual site model and overall corrective action process, and completing property profile forms.

El Cajon Community Development Corporation (CDC), El Cajon, CA. Mr. Johnson assisted the El Cajon CDC with several redevelopment projects that will maintain the viability of the City of El Cajon's vision for a renewed urban center. He was involved with remediating several environmentally impaired sites. His involvement included designing and implementing remediation systems, assessing soil and groundwater, conducting HHRAs, and conducting historical research on potential responsible parties. ESAs were completed to ascertain the possible presence of PHCs, volatile organic compounds (VOCs), USTs, burn ash, and toxic metals, and to evaluate the possible migration of constituents of concern from off-site releases.

City Heights Revitalization Corporation and Price Family Charity, Phase I ESAs and Subsurface Investigations for City Heights Mixed-Use Development, San Diego, CA. Mr. Johnson was the Project Manager for several multi-block Phase I ESAs and subsurface investigations for the City Heights Revitalization Corporation and the Price Family Charity. The project included detailed drilling and sampling programs, and remediation designs for soil contamination. Mr. Johnson developed an innovative soil reuse strategy for the Metro Villas project that allowed soil to be safely reused on site, resulting in savings of approximately \$350,000 in reduced remediation costs.

Port of San Diego, Environmental Services, San Diego, CA. Several Port of San Diego areas were environmentally impaired from industrial and commercial uses. Mr. Johnson assisted the Port of San Diego in determining environmental issues at these sites, and developed approaches for remediation. He was responsible for ESAs, remediation, permitting, regulatory compliance, hazardous waste management and disposal, and risk assessment. The ESAs indicated that some sites had been impacted from historical on- and off-site land use, asbestos-containing materials, and lead-based paint.

Chula Vista Jurisdictional Urban Runoff Management Plan, Chula Vista, CA. In response to newly adopted storm water regulations, Mr. Johnson assisted in preparing the Chula Vista Jurisdictional Urban Runoff Management Plan. The plan addresses three major phases of development to protect water quality during each phase: land-use planning for new development, construction, and land-use or existing development. SCS designed the plan to be compliant with the new regulations and documented procedural processes for implementing the plan. Because storm water technology continues to change and improve, the plan was developed to be a dynamic document.

Teaching Experience

Since 1987, Mr. Johnson has taught numerous courses on ESA, regulatory compliance, and hazardous materials management. Most of these sessions have been offered through the University of California, San Diego (UCSD) Extension. He has been an instructor/mentor for the following:

- UCSD, ESA Certificate Program for Hazardous Materials Management, San Diego, Extension (5 Years), San Diego, CA. The course presented detailed information on conducting and documenting a Phase I ESA, including the current ASTM standards and other regulatory guidelines. A Phase I discloses, prior to the transfer of title to property, areas of potential environmental concern and liability for the buyer, seller, and lending institution. The ASTM Standard Practice for Phase I's is intended to satisfy the crucial "appropriate inquiry" standard to allow someone to qualify for the innocent landowner defense under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) or Superfund. Course topics ranged from conducting a sound scientific investigation to techniques to effectively communicate information obtained during a Phase I.
- UCSD, Introduction to Hazardous Materials Management (5 Years), San Diego, CA. This interdisciplinary course helped participants understand the safe production, use, storage, treatment, and disposal of hazardous materials. The course covered the toxicology of hazardous materials and wastes, including types of agents, mechanisms of injury, and routes of entry into the body. Students evaluated the impact of these substances on the health of workers and community members and on the quality of air, water, food, natural resources, and wildlife. Students systematically reviewed major regulations related to hazardous waste, USTs, air and water quality, surveillance and disclosure (right to know), and the development of emergency contingency and response plans. Other topics included current issues related to the definition of how safe is safe, the role of alternative technologies in the reduction of waste volume and toxicity, problems in environmental law, and insurance and liability. This class was the introductory requirement for professional certification in hazardous materials management and ESA and remediation.
- UCSD, Regulatory Framework for Toxic and Hazardous Substances (5 Years), San Diego, CA. This course was an in-depth examination of federal, state, and local regulations and requirements for hazardous materials and wastes. Presented was an overview of legislative history and trends; industry's role in and perspective on regulatory development and its impact; and an intensive study of air, water, and land-use issues. Discussion topics included state and federal Superfund; permitting, planning, and site closure practices; and other issues necessary for a complete understanding of the regulatory framework.
- UCSD, Environmental Management Internship Program, San Diego, CA. This program was designed to provide participants with hands-on experience in an industry setting in order to bridge the gap between classroom theory and actual professional practice. Students demonstrated and translated the academic knowledge gained through enrollment in the air quality management, hazardous materials management, or ESA and remediation certificate programs. Students learned how to apply advanced technical theories to actual environmental situations; practiced common policies and procedures; understood critical thinking as it related to management styles; participated in regulatory and community environmental issues; problem solved; and exceled as a professional in

the environmental arena. Interns work under the direction of an instructor/mentor who assisted with course instruction as well as career and academic guidance.

Conferences and Seminars

Since 1986, Mr. Johnson has played an integral role in bringing short courses, seminars, and conferences, many of them pro bono, to various audiences to help them understand the complex elements of environmental management. Most of these sessions have been offered through UCSD Extension.

Mr. Johnson has spoken at, chaired, or been involved with numerous conferences in the environmental field, including the following conferences for UCSD and the University of California, Riverside (UCR):

- "Small Business Compliance with Hazardous Waste Regulations" (Chairman, 1988, 1994-95).
- "Underground Storage Tanks in San Diego County" (Speaker and Program Coordinator, 1987).
- "Hazardous Waste Issues in Property Transactions" (Chairman: 1990, San Diego, and 1989, Riverside, and Co-Chairman: 1988, San Diego).
- "Site and Risk Assessment and Remediation, a Third Research Update" (Co-Chairman).
- "International Conference on Regulatory Approaches for the Control of Air Pollutants" (Atlanta, Georgia; Author and Speaker).

He has been an instructor, moderator, sponsor, or lecturer for the following:

- Phase I ESAs: The New ASTM Standard. This seminar updated property owners and financial and real estate professionals on the current standard of practice for Phase I ESAs, especially the latest legal and technical issues involved. The standard has been set and continues to be updated by the ASTM. It represents an effort by a nationally recognized group to define good commercial and customary practice for conducting a Phase I. Most importantly, the ASTM standard for Phase I's was designed to satisfy the "appropriate inquiry" standard to allow someone to qualify for the innocent landowner defense under CERCLA or Superfund. As a member of the ASTM committee that worked on the Phase I standard, Mr. Johnson was an appropriate choice for moderator of this half-day seminar.
- Surviving Hazardous Materials Compliance. A Guide for Small Business. Designed for the small business owner, this seminar provided guidelines for dealing with hazardous materials and wastes. Topics were presented in nontechnical terms and included training, illness and injury prevention, storm water runoff, hazardous waste treatment and disposal, and the requirements and steps to minimize legal liability. Current regulations and those on the horizon were discussed. In addition, information was presented on assistance programs available for small businesses.
- Avoiding Environmental Liability in California. This seminar addressed the practical problems of current environmental regulations in the transfer and financing of land and commercial real estate. Some of the topics included regulations involving asbestos,

solvents, and other chemicals; transformers containing PCBs; USTs; and wetlands or other critical features. These regulations have been driven by federal legislation and often operate outside of the traditional local regulations of zoning, site plans, and certificates of occupancy. As a result, they require attention to a different and rapidly evolving regulatory arena with the potential for adverse consequences for completely innocent buyers and lenders. The participants addressed both avoiding entanglement with environmental problems and successfully resolving problems when they arise.

- Hazardous Waste, Liability, and Real Estate. This conference provided an update on the significant issues in hazardous waste management from the past few years. Addressed were regulatory, legal, financial, and technical issues involving contamination in real estate development and transfer. With the passage of state and federal Superfund laws, dire legal and economic consequences have forced lenders to protect their interests by initiating requirements for pre-purchase ESAs (Phase I). Designed for an audience of property owners/managers, financial investors, real estate professionals, legal counsel, and consultants, the seminar discussed liability and the need for sophisticated awareness of how to avoid personal and corporate liability.
- ESA and Mitigation at Hazardous Waste Sites. This conference, co-sponsored by the Association of Hazardous Materials Professionals, examined the impacts on soil and groundwater of an unauthorized release of hazardous waste. Topics included the current state of technology, current trends in soil gas surveys, SVE systems, bioremediation of petroleum-impacted soil, fate and transport and sensitive receptor models for risk assessment, assessing groundwater in fractured systems, vertical heterogeneity, vapor monitoring, and others. New remedial techniques and research, as well as case studies, were presented to aid those designing and managing site remediation. This technically oriented conference provided an update to professionals involved in the rapidly changing field of site assessment and remediation.
- Brownfields Initiatives, Environmentally Challenged Properties, and Other Topics. Mr. Johnson has presented and sponsored a number of sessions for local and national organizations such as the San Diego Bar Association, the North County Bar Association, and the American Society of Civil Engineers. Topics at these meetings have centered on regulatory reform, such as Brownfields Initiatives, opportunities for environmentally challenged properties, and trends in environmental legislation. Mr. Johnson has also contributed as a speaker for a number of professional development seminars at UC Riverside and UC Santa Cruz.

Academic Advisory Boards

Since 1987, Mr. Johnson has served on academic advisory boards for ESA and hazardous materials management. These boards explore career options and maintain certificate programs offered through UCSD Extension. Mr. Johnson has been a board member for the following:

• Hazardous Materials Management Advisory Board (6 Years). This board supported the certificate program in hazardous materials management. The program offered comprehensive, practical, state-of-the-art training and study in the principles, regulations, technologies, analytical practices, and field methodologies used in hazardous materials management. It was intended for industry and government managers, technicians, and other whose work involves the production-use, disposal, or regulation of hazardous materials or wastes. In addition, the program was designed to interface with the

professional certificate program for ESA and remediation. This board was dissolved in 1992 and reformed as the Environmental Management Advisory Board.

- Environmental Management Advisory Board (5 years). The Hazardous Materials Management Advisory Board was dissolved in 1992 and reformed as the Environmental Management Advisory Board (EMAB). The EMAB provided input and guidance not only to the hazardous material management certificate program, but also to the ESA, air pollution control, natural resources management, and solid waste management certificate programs.
- **Career Directions in Hazardous Materials Management (7 Years).** This program explored career options in effective management of hazardous materials and wastes. The San Diego-Tijuana border was one of the key areas targeted in the Integrated Environmental Plan (IEP) for the US-Mexico Border Area. This bilateral effort between the leading environmental agencies of both nations calls for the development of strengthened cooperative enforcement strategies, pollution prevention and reduction initiatives, technical training, and education. Qualified individuals were needed to plan and direct these important programs.
- **Career Directions in Site Assessment and Remediation (2 Years).** This board supported the certificate program in ESA and remediation and explored career options for skilled managerial and technical professionals. The professional certificate provided students with the skills necessary to plan and implement the ESA and remediation process, including inspections, remedial investigations, feasibility studies, remedial designs, remedial actions, and post-remedial actions.

Presentations

Mr. Johnson has spoken on the national radio talk show "Environmental Directions." He discussed his role in the passage of a recent resolution by the Los Angeles Board of Supervisors to deal with the problem of disposal of household hazardous waste in Los Angeles County. He also addressed the broader issue of hazardous waste management and the related issue of cross-media transfer of pollutants. He regularly makes presentations for groups. In the past, this has included the following:

- Women in Commercial Real Estate
- North County Bar Association of San Diego
- Building Owners and Managers Association
- San Diego Creative Investors Association
- Construction Financial Managers Association
- American Society of Civil Engineers
- State Bar of California
- Industrial Environmental Association
- Appraisers Institute