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# RESUME

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## DAN HERLIHY - PG, CEG, CHG, CEM, REA

1571 Parkway Loop, Suite A

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[www.dhenvironmental.com](http://www.dhenvironmental.com) (Web)

## Qualifications

Executive Manager for the environmental sciences with more than thirty years of experience in:

- Surface and Ground Water Hydrology
- Groundwater and Soil Contamination
- Environmental Project Management
- Regulatory Affairs & Expert Testimony

## Experience

### Dan Herlihy – Professional Geologist

Principal

Costa Mesa, CA

10/93 to Present

Provide independent water resource evaluation and environmental services to industry, municipalities, school districts, environmental consultants and attorneys. Services include: water resource studies for water districts and private entities, implementation of environmental compliance programs for manufacturing and other facilities, implementation of site assessments to identify and characterize environmental impacts, assistance with underground storage tank soil sampling, removal and closure, assistance with design, operation and maintenance of soil and groundwater remediation systems, assessment of waste disposal options, contaminant fate/transport simulations, health risk assessments, regulatory affairs and permit approvals. Co-chaired the Corrective Action Plan subcommittee for the development of regulatory guidelines with the San Diego County Department of Health Services. Selected as a Subject Matter Expert by the California Board of Registration for Geologists and Geophysicists to develop qualifications for the practice of hydrogeology in California.

### EMCON

Director of Operations

San Diego, CA

10/91 to 9/93

Created and managed regional office in San Diego to provide environmental services to the US Navy, national companies, local industry, County and City governments and Maquilladoras in Mexico. Primary services included: underground storage tank soil sampling, removal and closure, health risk assessments, design and development of groundwater monitoring and landfill degassing programs for existing and new landfills, preliminary site (phase 1) assessments to support property transfers and assisting the Department of Health Services with the formulation of regulatory guidelines.

Director of Geology

Los Angeles, CA

12/86 to 9/91

Managed up to 22 professional and clerical support professionals, recruited staff, evaluated personnel performance, and administered salaries and bonuses. Responsible for the profit and loss of projects with gross annual sales of approximately \$3 million. Directed environmental audits and assessments, proposed engineering alternatives for corrective action plans, and provided expert depositions and testimony. Interfaced with clients and regulatory agencies, and provided technical oversight and personnel training for regional offices.

### The North American Coal Corporation

Senior Hydrogeologist

Dallas, TX

7/81 to 10/86

Managed the Hydrology and Geotechnical Department. Responsibilities included budgeting, scheduling, proposal preparation, work organization, cost estimation, personnel management and regulatory interface for surface water, groundwater and geotechnical investigations. Provided technical expertise for corporate mining projects. Supervised well installations and subsurface evaluations in Mexico and Texas. Routinely designated to present technical issues to joint venture partner representatives.

## **UNC Teton Exploration Drilling Company**

Hydrogeologist

Casper, WY

6/79 to 7/81

Directed evaluations for in-situ uranium mining operations in Wyoming, New Mexico and Australia. Provided technical writing for federal and state permit applications for mining and waste disposal, and successfully obtained permits. Acted as industry liaison with civil organizations concerned with potential environmental impacts associated with mining and disposal activities.

## **Wyoming Department of Environmental Quality**

Hydrogeologist

Cheyenne, WY

7/77 to 4/79

Evaluated comprehensive environmental permit applications for proposed and active mining operations in Wyoming. Advised the Wyoming Attorney General's Office on potential ramifications of proposed technical rules and regulations, and provided expert witness testimony at litigation hearing before the Wyoming Environmental Quality Counsel.

## **Wyoming Water Resources Research Institute**

Hydrogeologist

Laramie, WY

6/76 to 9/76 & 1/77 to 5/77

Drilled, surveyed and sampled groundwater monitoring wells. Performed aquifer tests and developed computer codes for statistical analysis and ground water flow modeling.

## **Education**

- 1977: University of Wyoming - Hydrogeologic studies under National Science Foundation Traineeship and Spears & Belford Fellowships
- 1975: University of New Hampshire – Masters of Science in Geology
- 1973: Long Island University at Southampton – Bachelors of Science in Geology - Cum Laude

## **Professional Registrations**

Professional Geologist (PG #4388), CA

Certified Engineering Geologist (CEG #1378), CA

Certified Hydrogeologist (CHG #107), CA

Registered Environmental Assessor (REA #224), CA

Certified Environmental Manager (CEM #1808), NV

Certified Professional Geologist (CPG #6210), AIPG

## **Professional Development**

- 2009: Vapor Intrusion Pathway- A Practical Guideline: Interstate Technology and Regulatory Council (ITRC), Long Beach, CA
- 2003: Temporary Erosion Control Training for Designers: Office of Storm Water Management, Caltrans District Office, Irvine, CA
- 2003: Storm Water Management Plans for MS4 Phase II Facilities: California Coalition for Adequate School Housing, Sacramento, CA
- 2001: Real Estate Transactions Involving Contaminated Properties, Bridgeport Continuing Education, North Hollywood, CA
- 1997: ISO - 14000 Lead Environmental Auditor Course for Registrar Accreditation Board Certification, International Quality & Environmental Services, LLC, Los Angeles, CA
- 1997: Environmental Course, Southern California Edison CTAC Electric Solutions Center, Irwindale, CA
- 1996: On-Site Recycling and Tiered Permitting Requirements (Module V), California Compliance School, Bakersfield, College Program, Los Angeles, CA
- 1995: Precision Cleaning Options for California Manufactures-Water and Solvent Based Processes, Southern California Edison CTAC Electric Solutions Center, Irwindale, CA
- 1995: Rule 1501 Training, Employee Transportation Coordinator, South Coast Air Quality Management District, Diamond Bar, CA
- 1995: Air Emissions Workshop, South Coast Air Quality Management District, Diamond Bar, CA
- 1995: Southern California SB 14 Workshop, Cal-EPA Department of Toxic Substances Control, Downey, CA
- 1995: Hazardous Waste Identification, Onsite Management, Preparedness, Prevention, & Training, and Transportation Requirements (Module I - IV): California Compliance School, Bakersfield, College Program, Los Angeles, CA
- 1995: Cost-Effective Environmental and Health & Safety Management (Spring Workshop), Industrial Environmental Coalition of Orange County, Costa Mesa, CA

- 1994: Bioremediation of Organic Chemicals in Soil and Groundwater, Environmental and Technical Services, HazMat West, Long Beach, CA
- 1994: Short Course in Environmental Chemistry, BC Analytical, Glendale CA
- 1990: Situation Leadership Seminar, CareerTrack, Century City, CA
- 1990: Management Effectiveness Seminar, CareerTrack, Long Beach, CA
- 1990: Real Estate & Financial Transactions: Environmental Conference Series, Pettit and Martin, Long Beach, CA
- 1988: OSHA/RCRA Site Investigation Training: SARA 126(D)(1) & OSHA 1910.120(e)(2), EMCON Associates, Burbank, CA
- 1986: Emergency First Aid and Response, MSHA Program, University of Texas, Austin, TX
- 1985: Economic Analysis of Surface Mining Projects, University of Kentucky, Lexington, KY
- 1983: Executive Presentation Seminar, Verbal Communications, Inc., Dallas, TX
- 1979: Air & Reverse Rotary Drilling, National Water Well Assoc., Univ. of Colorado, Boulder CO

## ***Symposia, Publications & Seminars***

Author and Lecture, 2004, Using Ternary Diagrams and Distance Concentration Graphs to Identify Mechanisms Controlling the Distribution of BTX, TBA and 1,2 DCA in Groundwater: National Groundwater Association Conference on MTBE and Perchlorate, Costa Mesa, CA

Author and Lecturer, 2002, What You Should Know About Property Contamination, 45-Minute Presentation, Costa Mesa, CA

Author and Lecturer, 2002, Contaminant Hydrogeology for Practitioners, One-day Comprehensive Course, Costa Mesa, CA

Author, 1999, Hazard Communication, Right-to Know, and Hazardous Materials Management, Video Training Instructor Manual: Compliance 2000, Costa Mesa CA

Author, 1999, Emergency Response, Injury & Illness Prevention, and Safety, Video Training Instructor Manual: Compliance 2000, Costa Mesa CA

Instructor, 1995, 1996 & 1997, Introduction to Environmental Regulations in California: Greater Los Angeles Chapter, National Safety Counsel, General Motors Training Center, Burbank, CA

Co-Author and Co-Chair, 1994, Guidelines for the Preparation of Corrective Action Plans for Underground Storage Tank Systems, Site Assessment and Mitigation Manual, SAM Division, San Diego County Department of Health Services, San Diego, CA

Author, 1994, The Role for Risk Assessment in Site Remediation in California, Sixth Annual Underground Storage Tank Conference, California State Water Resources Control Board, San Diego, CA

Author, 1993, Selecting Well Pumping Rates for Groundwater Remediation Design, in Hydrocarbon Contaminated Soils and Groundwater, Vol. 3, Kostecki and Calabrese (Ed), Lewis Publishers, Boca Raton, LA

Author, 1993, A Planned Approach to Environmental Compliance Offers Cost Savings, San Diego Business Journal - Environmental Supplement, San Diego, CA

Author, 1991 & 1990, Innovative Alternative to Deal with Contaminated Soil, AAPG-SEPM-SPWLA Annual Convention, Bakersfield, CA, and Industrial Environmental Association, San Diego, CA

Session Chairman, 1989, Pump and Treat, Does it Work?, HazMat West, Anaheim, CA

Co-Author, 1988, Estimating Discharge Rates for High Permeability Aquifers in Groundwater Remediation Design, Hazardous Materials Management Conference and Exposition, Anaheim, CA

## REFERENCE LIST

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### Technical Support

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### Litigation Support

**BRIAN PADGETT**

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704 South 9<sup>th</sup> Street  
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**DENIS LAW**

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**Dan Herlihy - RG, CEG, CHG, REA**  
**Selected Depositions, Court Testimony, Hearings and Arbitration**

<b>Year</b>	<b>Activity</b>	<b>Parties to Case</b>	<b>Court/Hearing</b>	<b>Case Summary</b>
2009	Deposition	Centerstone Corp. v BLM	San Bernardino Superior Court	Provided testimony regarding anomalously high arsenic, antimony and metal concentrations in soils on lands proposed for residential development.
2007	Court and Deposition Testimony	Packaging Advantage Property Assoc. (PAPA) v Package Advantage Corp. (represented PAPA)	California Superior Court, Los Angeles County – Southeast District	Retained by plaintiff to review Notice of Violations and other documents, and perform a site inspection, to determine if manufacturing practices at a manufacture facility are adequate to mitigate hazardous waste releases that tend to occur repeatedly.
2001	Case Settled Prior to Deposition	SCIF Portfolio I, LLC Vs Safety Components International (SCI) (represented SCI)	United States Bankruptcy Court for the District of Delaware	Retained by defendant to propose and implement a groundwater remedial action plan (RAP) to cleanup groundwater impacted by the past release of chlorinated solvents as a result on long-term manufacturing operation on the property by the tenant (defendant). The plan was accepted by the plaintiff (landowner), and the case was settled.
1994	Attend Deposition	People Vs Chrisman (represented Chrisman)	Case heard in Orange County Superior Court. Expert services provided in Law Offices of Barger and Wolen, Irvine, California	The State of California condemned a service station so that an intersection could be widened. During subsequent construction, Caltrans concluded that the exiting underground storage tanks had leaked in the past and removed soils and groundwater at the site as hazardous waste. The state then sought to offset the property owner's compensation with the cost of dealing with the removal of the allegedly impacted soils. I worked with the attorney on the case to depose the opposing consultant to support the case that most of the soils removed would not have been classified as hazardous if the proper assessment and soil segregation program had been implemented. The case was eventually dismissed on legal grounds.
1991	Testimony at Deposition	Shea Vs Datacard (represented Steelcase-one of the defendants)	Settled out of Court in favor of the defendant	Groundwater beneath the plaintiff's site was impacted with chlorinated solvents. It was, therefore, alleged that the source of the plaintiff's contamination down-gradient must have originated from the defendant's contamination. I testified in deposition that the chlorinated solvents beneath the plaintiff's facility were different from the solvents observed beneath the defendant's facility, the particular solvent compounds were not consistent with daughter products that would be expected from the contamination beneath the defendant's site, and the down-gradient extent of the defendant's contamination plume was delineated up-gradient of the plaintiff's contamination. The finding was that the defendant did not contribute to the plaintiff's contamination.
1990	Testimony at Arbitration Hearing	Goodwin Properties Vs Goodwin Chemical et. al. (represented Goodwin Properties)	Arbitration Attorneys Office	The plaintiff charged that contamination resulting from the use of chlorinated solvents in a dry-cleaning business was the responsibility of the property tenant. The plaintiff operated the business for several years prior to the tenant takeover of the business. The tenant operated the business for approximately 20 years. I suggested that the currently observed contamination was probably a result of more recent solvent releases because the older releases would have had time to volatilize. The arbiter ruled that the tenant would be responsible for the cleanup.
1989	Testimony in Court	Woodland Hills Nissan Vs Imes (represented Nissan)	Los Angeles Superior Court	The plaintiff charged that waste oil contamination beneath the site was the result of the defendant's neglect and past waste oil storage practices. Based on the available data, we were able to show that the defendant was responsible for the contamination. The case was decided in favor of the plaintiff in that the defendant was found to be solely responsible for the contamination.
1979	Testimony at Two Hearings	UNC Teton & local ranchers (represented UNC Teton)	Converse County Commissioners Hearing, Glenrock, Wyoming	Local ranchers were concerned that the planned well-injection by UNC Teton of high concentrations of sodium bicarbonate as a new technology to dissolve and recover uranium ore would impact their local groundwater supplies. I testified that the geologic conditions in the area suggested that pollution of their water supplies was highly unlikely, and developed and implemented an extensive groundwater-monitoring program to demonstrate that their water supplies would be protected. The monitoring program was accepted and the mining operation was approved.
1978	Testimony at Hearing	Environmental Defense Counsel (EDC) Vs Wyoming Department of Environmental Quality	Wyoming Environmental Quality Counsel Hearing, Cheyenne, Wyoming	The EDC alleged that mining requiring groundwater removal would impact a unique surface water resource within the Great Divide Basin of Wyoming, and that mining should be prohibited. I testified, on behalf of the State of Wyoming, that the allegation was based on overly conservative assumptions, and that groundwater dewatering may be feasible if properly implemented and monitored. The moratorium on mining in the Basin was not granted, but the State recognized that the natural water resources must be protected and monitored during future mining operations.

**Dan Herlihy - RG, CEG, CHG, REA**  
**Selected Attorney-Client Privilege Work Products**

Year	Activity	Parties Involved	Description
2010	Landfill Expansion	Foley v. Glenn County	Glenn County wishes to condemn private land adjacent to a county landfill in order to expand the operation, and establish a buffer zone for landfill gas monitoring. The owner wishes to assess the environmental consequences of the expansion, and determine if he is properly compensated for his land.
2008	Property Contamination	Rincon Band of Luiseno Indians vs Melvin Cloninger, et. al.	Retained to assess the environmental condition of a property on the Rincon Reservation in San Diego County that may be impacted with petroleum hydrocarbons and solvents, and present findings to Rincon Band of Luiseno Indians (Plaintiff). Representing the defendant.
2008	Landfill Closure Assessment	Paul Aurignac, Cederquist et al. v. Helen Aurignac et. al.	Retained to assess the following; 1) Adequacy of previous studies that served as a basis for the proposed Landfill Closure Plan, 2) Compliance of proposed Landfill Closure Plan with regulatory requirements and California guidelines, 3) Adequacy of proposed Landfill Closure Plan to protect human health and the environment as required by California regulations, and 4) Adequacy of proposed Landfill Closure Plan to re-establish former beneficial land uses to the satisfaction of the majority property owners.
2007	Assessment of Nitrates in Groundwater	City of Ripon v. RF Land, Inc, f/k/a Ripon Farm Service, Inc.	Compiled and reviewed site-specific information regarding groundwater flow, nitrate and ammonia chemistry, and potential releases from a fertilizer mixing facility to determine the potential impact to nearby municipal water supply wells. The case is in progress. Representing RF Land, Inc., San Joaquin Co. Superior Court.
2007	Groundwater/Soil Contamination	Golden Chariot Mine v. US Department of Justice	Sampled groundwater and soil within an near an abandoned gold mine shaft to determine if mine flooding caused by the US government during fire suppression activities resulted in degradation of groundwater and contamination of soils. Represented Department of Justice (DOJ).
2006	Hydrogeology & Groundwater Modeling	Sante Fe Springs CDC v. Powerine Oil Co. et al.	Compiled and reviewed site-specific information regarding groundwater flow, contaminant chemistry, and potential releases from a former refinery to develop a technically defensible groundwater contaminant fate and transport computer model to simulate historic petroleum hydrocarbon plume formation and migration. Represented Powerine Oil Co.
2004	Parking Structure Potential Contamination	City of Reno v. Rockledge Corporation, RFC Reno LLC	A Reno Casino alleged that nearby construction of a railroad caused contaminated groundwater to enter the lower level of a parking structure A detailed hydrologic study demonstrated that high-turbidity discolored groundwater entered the foundation, but was not contaminated nor caused by railroad construction. However, new foundation cracking was identified that appeared to be caused by excessive vibration from use of a temporary railroad track placed adjacent to the Casino. The City of Reno agreed to repair the foundation cracks, and settled the case.
2004	Structure Settlement	M. Bergen v. City of San Diego	Mr. Bergen asserted that a leaking underground city water line caused saturation and subsequent settlement of fill and alluvial sediments beneath his property, and caused structural damage to his residence. I evaluated available data to form an opinion regarding the movement of water from the leaking pipe into the subsurface. The case was settled out of court.
2002	Charnock MTBE Project	EPA, RWQCB and Oil Companies	Retained to assess the source of impact of methyl-tert-butyl-ether (MTBE) in groundwater beneath a former service station within the Charnock Well Field near Santa Monica, California. The Charnock Groundwater Sub-basin has been impacted by the release of MTBE, and the EPA has identified certain Potential Responsible Parties (PRPs) to assist with the cleanup of the groundwater supply.
2000	CA Proposition 65	Solano County v. Major Oil Companies	The Solano County District Attorney sought to assess damages for major oil companies as a result of release of petroleum hydrocarbons to subsurface soils and groundwater allegedly in violation of California Proposition 65. I evaluated previous assessments for each of the sites in question, determined the extent of impact based on the available date, and developed criteria for Solano County so that each of the sites could be evaluated on a consistent basis. The Solano County District Attorney elected to suspend the cases.
1999	Property Contamination	Ace Auto v. On Line Auto et. al.	A cross-complainant was charging that Ace Auto and On Line Auto participated in activities that potentially contaminated subsurface soils and groundwater, and that this contamination was not properly disclosed. Further, the assessments performed to date do not appear to adequately delineate the extent of contamination. I reviewed the assessment work performed to date, and recommended additional assessment work that should be implemented to delineate the extent of subsurface impact. The case was settled. Representing the cross-complainant
1998	Property Contamination	Esquire Investments v. The Southern California Gas Company et. al.	The Southern California Gas Company wished to apply a land restriction covenant to property owned by Esquire Investments in lieu of implementing a site remediation plan. The site contained hazardous substances derived from a manufactured gas plant that operated on the property during the end of the nineteenth and beginning of the twentieth centuries. The covenant restriction would limit property use, curtail construction activities, and could require proposition 65 warnings within the office building now occupying the property. The plaintiffs contended that the Gas Company should be required to fully remediate the property. Represented the plaintiffs.
1995	Pre-trial Preparation	Phoenix Home Life Mutual Insurance Company v. American Best Cleaners	The defendant (American Best Cleaners) allegedly disposed of perchloroethene solvent (perc) down the sewer drain within their facility. Based on analyses of soil samples, solubility of PVC in the presence of concentrated perc solvent, video observations of the pipe using a special camera, and the suite of chlorinated hydrocarbons detected in soil samples it appears that perc solvent dissolved the PVC sewer pipe and impacted soils beneath the business complex. The technical findings suggest that perc was disposed through the sewer piping. Represented Phoenix Home Life Mutual Ins. Co.
1990	Site Assessment and Conceptual Plans for Remedial Action and Site Closure	Newhall Refinery & the Regional Water Quality Control Board.	The refinery soils and near surface groundwater was impacted with petroleum hydrocarbons, chlorinated hydrocarbons and metals. The vertical and lateral extents of impacted soils were delineated, the nature and extent of groundwater impact were identified and several closure options and costs were presented. The Regional Water Quality Control Board accepted the assessment, and three toxic pits were closed under the Toxic Pits Cleanup Act (TPCA). Due to the change in property values, the appropriate remedial action and closure option has not been selected or implemented to my knowledge. Represented Newhall Refinery.

<b>Year</b>	<b>Activity</b>	<b>Parties Involved</b>	<b>Description</b>
1989	Risk Assessment for Lead Exposure and other assessments	Conejo Valley Unified School District & Ventura Co. Environmental Health Department	The Ventura County Environmental Health Department (VCEHD) contended that lead contamination associated with a former underground storage tank (UST) required excavation and disposal as hazardous waste. Based on literature research and a risk analysis, it was demonstrated that there was no significant risk to human health or the environment associated with the soils if left in place. Based on this work, the VCEHD accepted the risk analysis and granted closure without the need to remove the impacted soils. Represented the Conejo Valley Unified School District.
1989	San Fernando Valley Superfund Site	LAAGCO Sales, Los Angeles Regional Water Quality Control Board & the US EPA	LAAGCO Sales was charged with causing the contamination of subsurface soils in the San Fernando Valley Superfund Site, and therefore was to be included on the EPA list of Potentially Responsible Parties (PRPs). It was demonstrated that the contaminant at their site was paint thinner, and that paint thinner does not contain the chlorinated hydrocarbons associated with the San Fernando Valley groundwater contamination. After several years of discussions, the EPA and RWQCB agreed with these findings. Represented LAAGCO Sales.