soil Pacific Inc.

Geotechnical and Environmental Services

STATEMENT OF QUALIFICATIONS

Introduction

SOIL Pacific Inc . is a full service Environmental and Geotechnical Engineering firm. Our staff is composed of Professional Engineers (P.E.), Registered Geologists (R.G.), Certified Engineering Geologists (C.E.G.), Registered Environmental Assessors (R.E.A.), and Ph.Ds in specialized areas of services that we offer.

Soil Pacific Inc.'s staff has completed many projects throughout the world. Our engineering services include:

- Environmental engineering
- Geotechnical engineering
- Geological hazard investigation and mitigation

Soil Pacific Inc.'s staff is well-versed in the environmental and geotechnical engineering, mainly in groundwater and soil contamination investigation and remediation, utilizing approved and state-of-the-art techniques. Our team of professional engineers and project managers provide the highest quality of service to our clients.

Members of the Soil Pacific team have demonstrated their expertise and managerial capabilities in carrying out a number of environmental projects throughout the United States and internationally.

Our Services focus on meeting our clients' needs by providing the latest available technology, while taking into consideration time, economic and logistical constrains. The breath of SPI technical experience and comprehensive knowledge in emerging technologies has enabled the firm to provide cost effective services to private, industrial, and municipal clients in a wide range of areas.

The following pages illustrate our corporate and individual experiences and present an overview of the multi-disciplinary capabilities of our firm. We hope that upon further review of our qualifications, you will add, with confidence, Soil Pacific Inc. to your list of approved environmental consultants.



Environmental Engineering Services

Environmental Information Management

Soil Pacific Inc. (SPI) has developed a comprehensive and cost-effective program to provide multidisciplinary environmental impact assessment services. We provide a single source of services, incorporating environmental impact assessments with our overall package of services. These capabilities range from site investigations through remedial design, construction, and cleanup.

Our engineers and scientists offer the necessary expertise, supported by the appropriate resources and technology, to describe the physical, chemical, and biological environment at the site. This, in turn, allows us to quantify base-line conditions and assess short-term and long-term impacts on human health and the environment. This package of services includes:

Environmental Impact Studies

Environmental Impact Statements/Reports Endangered Species Analyses Wildlife Habitat Evaluations Hydrologic and Geologic Characterization Alternatives Analyses Identification and Evaluation of Mitigation Measures

Wetland Assessment and Analyses

Delineation of Wetland Boundaries Wetland Functional Attribute Impact Analyses Compliance with Federal and State Wetland Protection Regulations Identification and Evaluation of Mitigation Measures Design and Implementation of Compensatory Wetlands

Natural Resource Damage Claims

Determination that Incident is Covered Under CERCLA or Clean Water Act Computer Modeling of Direct and Indirect Injury to and Loss of Natural Resources Economic Damage Assessment from Release of Oil or Hazardous Material

Water Quality Studies

Drinking Water Supply Evaluation (Surface and Groundwater) Eutrophication Assessment and Lake Restoration

Contaminant Impact Analysis

Risk Assessment (Public health and Environmental) Bio monitoring Evaluation of Applicable or relevant and Appropriate Requirements (ARARs) Toxicity Testing Consultation Hazardous Waste Remediation



Environmental Information Management

Groundwater Contamination Studies

Characterization of Contaminant Plumes Fate and Transport Studies Determination of Groundwater Protection Standards Evaluation of Maximum Contamination Levels (MCLs) Determination of Alternate Concentration Limits (ACLs)

Environmental Permitting Assistance

National Pollutant Discharge Elimination System (NPDES) Permit Preparation and Review Army Corps of Engineers 404 Permit Preparation and Review State and Local Wetlands and Waterways Permit Preparation and Review

Alternate Concentration Limit (ACL) Demonstrations

Public Health and Environmental Criteria at Points of Exposure Attenuation Factors Relating Concentrations from Points of Exposure to Points of Compliance ACL Limits in Support of RCRA Corrective Actions and Superfund Remedial Actions



Soil Pacific Inc.'s experience, gained from providing these services to state and Federal governments, as well as to utilities, industry, and developers, allows our clients to take advantage of total environmental management services. These services are particularly important in today's regulatory climate as Federal, state, and local agencies continue to require more detailed scientific data for environmental impact analysis studies.

Soil Pacific Inc. is a full service environmental management company meeting clients' needs in hazardous waste management from site investigation through remedial design, construction, and cleanup. The firm also offers a complete range of energy services for hydroelectric facilities, power plants, and alternative fuel projects. All SPI capabilities are supported by comprehensive services in wastewater and design engineering.

Feasibility Study

A feasibility study is the link between the site investigation and remedial design phases of a project. The purpose of the feasibility study is to consider the site conceptualization and problem definition and evaluate management options and technologies that would protect public health and the environment. The technologies identified as most suitable for the particular site conditions are effectiveness. risk evaluated for reduction. implement ability, and cost. For sites included on the National Priorities List, the evaluation criteria found in the National Contingency Plan also are applied to the various remedial options.

Identification of technologies that may be applied at a site depends upon the remedial philosophy of the client and engineering judgment. Client risk profiles may dictate a preference for "tried and tested" technologies rather than innovative and emerging technologies or a preference for technologies that can be quickly mobilized to address a site problem. Clients may want to explore new technologies that may be more effective in terms of contaminant control or destruction and cost. Selectina available technologies to be screened requires the engineer to be diligent in understanding the technologies and in collecting performance data. A thorough understanding of the strengths and weaknesses of a technology and its ability to deal with changing site and contaminant conditions is of paramount importance.

Once the remedial management options and preferred technologies have been identified, the alternatives are rigorously evaluated. The evaluation criteria are applied for each technology, and a summary is prepared for client selection.

Criteria include:

Effectiveness at the particular site with the specific contaminants identified in the site characterizations. This requires remediation goals to be established through the risk/public health/endangerment assessment and an analysis of the rules, regulations, and policies of the environmental regulatory agencies. Also, the ability of the technology to deal with changing site conditions that may be encountered is considered.

Implement ability of the technology within the constraints of the site conditions and remedial philosophy of the client. Is there available capacity in the remediation schedule?

Cost of the remedial alternative. Is the technology "capital intensive" or "labor intensive"? How will costs change with changing site conditions? How much risk exists for technologies with little or no cost data available?

SPI uses computer modeling and electronic literature searches to help evaluate the response of alternatives and to stay current on emerging technologies and applications of technologies.

These and other criteria allow review and analysis of the most appropriate technologies and management options leading to the selection of the remediation alternative that fulfills the client's goals.

Environmental Site Assessment

SPI carefully examines the specific needs of each project and considers all available treatment technologies before selecting the appropriate treatment technology. Frequently, multiple technologies are used to form a single, effective, and efficient treatment process.

SPI's designs include complete specifications of all equipment and materials, as well as a full set of construction drawings. The staff includes engineers who are vastly experienced in construction and environmental project management as well as its application in the remediation process.



- Phase I Environmental Audit
- Phase II Environmental Site Assessment
- Site Investigation for Chemical Contamination of Soil and Groundwater
- Soil Gas Survey
- Groundwater Contamination Investigation for Petroleum Hydrocarbons
- Cost-effective assessment of suspected contamination
- Development of recommended remedial actions



- Computer modeling
- Geophysical investigations
 - Magnetic
 - Electromagnetic
 - Seismic reflection and Refraction techniques
- Pesticide Characterization and Testing
- Aquifer characterization
 - Well Installations
 - Slug Tests
 - Groundwater Flow-Direction And Flow-Rate Measurements
 - Single- And Multi-Well Pump Tests

Industrial/Hazardous Waste Treatment

For more than 26 years, the treatment of municipal and industrial wastes has been a major portion of business for Soil Pacific Inc. (SPI). In recent years, awareness of the hazardous nature of much of the wastes produced prompted SPI to form a group that could specifically deal with these problems. Expertise from throughout the SPI organization is now concentrated into a single group to provide both governmental and industrial clients with a full range of capabilities in dealing with hazardous waste treatment problems.

Treatment must be considered after all practical efforts to eliminate the production of waste products have been explored. The treatment technologies that may be employed are as diverse as the range of hazardous materials produced. These technologies may include:

PHYSICAL TREATMENT

- Carbon adsorption
- Air/stream stripping
- Ion exchange
- Soil flushing/soil washing
- Filtration
- Dissolved air flotation
- Flocculation
- Centrifugation
- Sedimentation

CHEMICAL TREATMENT

- Ionized Micellar Biodegradation
- Ultraviolet photolysis
- Ozonation
- Chemical precipitation
- Oxidation/reduction
- Neutralization

BIOLOGICAL TREATMENT

- Composting/landforming
- In situ biodegradation
- Bioreactor/slurry-liquid processing
- Rotating biological contactors

THERMAL TREATMENT

- Rotary kiln incineration
- Circulating bed combustion
- Infrared incineration
- Fluidized bed incineration
- Vitrification
- Pyrolysis
- Advanced electric reactor

FIXATION/STABILIZATION

- Pozzolonic solidification
- Sorption
- Polymerization
- Asphalt-based

microencapsulation

SPI carefully examines the specific needs of each project and considers all available treatment technologies before selecting the appropriate treatment technology. Frequently, multiple technologies are used to form a single, effective, and efficient treatment process.

SPI's designs include complete specifications of all equipment and materials, as well as a full set of construction drawings. The staff includes engineers who are experienced in construction management.

The final design considers all aspects of the problem and the client's needs. Close attention is given to costs and labor requirements and to maintaining a design capable of meeting all regulations and of minimizing the client's future liabilities. lf complete recovery or destruction of the hazardous waste cannot be achieved by practical means, feasible disposal alternatives must be considered. The best overall design must also consider the volume and management cost of the treatment residues and effluents.

Underground Storage Tank Management

Soil Pacific Inc. (SPI) can develop an underground tank management program to meet a client's specific needs. Early preventive measures will result in substantial savings by avoiding costly problems and liabilities.

Existing Tanks

- Representation and support with regulatory agencies
- Evaluation and recommendation of cost-effective tank integrity monitoring and maintenance methods
- · Leak detection through soil and ground water surveys
- Installation of subsurface ground water and vapor monitoring devices for long term site monitoring
- Tank removal and replacement
- · Determination of dimensional configuration of plumes in soils and groundwater
- Cost-effective assessment of suspected contamination and development of recommended remedial actions
- Design and implementation of turnkey remediation

Tank Abandonment

- Soil assessments, including evaluation of soil stability and corrosion potential
- Ground water quality assessment
- Installation of tank backfill monitoring systems
- Tank registration and permitting
- Tank integrity testing
- Leak detection programs

- Tank monitoring programs
- Remedial action
- Site closure



Groundwater Pollution Assessment

Soil Pacific Inc. (SPI) has a staff of trained geologists, hydrogeologists, geotechnical engineers, and water resources engineers who provide a full range of ground water services. In addition, SPI environmental, civil, mechanical, and chemical engineers provide remedial action designs. More specifically, services include:

- Preparation of field investigation plans, sampling plans, and ground water monitoring programs
- Design and preparation of specifications for monitoring, testing, extraction, and water supply wells;
- Field geological services for logging soil and bedrock borings, installing monitoring and production wells, conducting aguifer tests, and collecting soil and ground water samples
- Performance of RCRA comprehensive ground water monitoring evaluation
- Evaluation of geologic and hydrogeologic data
- Computer modeling of groundwater flow, contaminant transport, and proposed remedial actions.

If the schedule permits, SPI often proposes a ground water contamination investigation program because data on waste disposal locations, past disposal practices, and hydrogeologic conditions are often limited or unknown. After reviewing all available information for a site, further action may include conducting surface and subsurface geophysics (optional), installing a limited number of monitoring wells and sampling these wells, collecting ground water and geologic formation samples, and performing hydraulic conductivity or permeability tests for saturated and unsaturated zones. Based on an evaluation of the data collected, monitoring wells are installed, and other investigations are conducted as required. Analytical and numerical computer models are used to predict ground water flow and contaminant transport, identify migration pathways and potential receptors, and assess the ability of remedial actions to contain or otherwise mitigate contamination.



The breath of SPI technical experience in ground water investigations and remediation, along with a comprehensive knowledge of the environmental regulations, has enabled the firm to provide cost effective services industrial, to private, and municipal clients in site evaluations. Other related experience includes preparing and implementing RCRA permits, ground water monitoring programs, corrective action wetlands measures, and restoration and mitigation.

Soil Gas Sampling

What soil gas sampling can do for your organization:

■ Substantially reduces total site investigation cost by up to 50%

Reduces investigation time; preliminary results available within 24 hours

Reduces the costs and amounts of laboratory chemical analyses

Real estate transactions: Reduces cost and time for site assessment

Minimum disruption of business operating facilities

■ Defines soil/ground water contamination origin; can identify source as underground or aboveground leaks, chemical spills, accidents, waste disposal sites, etc.

Soil gas sampling has been used for:

■ Environmental surveys - underground and aboveground tanks, gas stations, fuel storage depots and pipelines, surface spills/leaks, waste disposal sites, ground water contamination;

 Real estate surveys - land acquisition, tenants change, purchasing industrial buildings or land;

Corporate acquisitions - risk and liability assessment;

Monitoring of facilities - industrial, tank farms, fault and fractures, waste sites, fuel and chemical storage facilities.

SPI provides cost-effective site investigation technology that makes sense.



Radon Testing

Radon is an odorless, colorless, radioactive gas produced by the decay of traces of uranium in soil. Radon gas can be detected in nearly any sample of soil. Under certain conditions radon may accumulate in homes, school buildings and commercial buildings resulting in significant health effects.

Using epidemiological data from mining studies, the U.S. Environmental Protection Agency (EPA) estimates that between 10,000 and 15,000 people will die from radon-induced lung cancer this year. If these estimates are correct, radon exposures in homes, schools and offices account for as much as 15 percent of all lung cancer deaths. Radon represents the greatest single environmental risk to the general population with the sole exception of cigarette smoking.

Since there is no villain in the radon story - radon is naturally occurring - the public has been somewhat apathetic toward the health risks associated with radon exposures. The U.S. EPA has recommended that all homes, offices, and schools be tested for radon. The General Services Administration (GSA) has required that all facilities owned or leased to the U.S. Government be tested for radon levels. Major real estate relocation firms are requiring radon tests before approving property for relocation purposes. In some parts of the United States radon testing is a standard requirement for real estate transactions. Realtors, mortgage bankers and builders may find it increasingly necessary to test property for radon levels as part of the real estate transfer process.

Soil Pacific Inc. (SPI) is uniquely equipped to provide radon testing and consulting services to developers, builders, realtors and mortgage lending institutions.

SPI's radon credentials include:

- SPI has been found to be proficient in radon monitoring in the EPA's Radon Measurement Proficiency Program (RMPP);
- SPI has staff members who have met the requirements of EPA's Radon Contractor Proficiency Program (RCPP).

SPI can provide the following radon related services:

- Radon measurements in homes, offices, and schools following EPA protocols;
- Radon measurements in soils and water
- Rapid turnaround radon screening measurements;
- Mitigation consulting, design and follow-up testing

Remedial Design



SPI offers expertise in design projects using "fast-track," lump sum, unit price, and cost-plus types of construction contracts. The firm utilizes computer-aided design and drafting (CADD) systems, where appropriate, to facilitate the design process and to offer flexibility in the design documents.

Remedial Design

Once a remedial action is selected from the options available for a site, the technical design of the process systems must be completed. In many cases, technologies evaluated in the feasibility study must be "fine-tuned," and supporting processes, such as material handling systems, emission controls, quality control, and site improvements, must be designed. To assist in controlling remedial costs and construction reviews, a construction plan is developed. Remedial designs and specifications translate the findings of site investigations, feasibility studies, risk assessments, and remedial designs into specific actions that constitute the "fix." All design activities are performed in the complex environment associated with hazardous materials, substances, and wastes.

SPI engineers and technicians translate the technical requirements of the regulations and guidance documents into engineering and design criteria. The role of the SPI design engineer is to initiate implementation of the selected remedy by skillfully applying engineering and scientific principles and processes in a cost-effective and socially responsible manner.

SPI's multidisciplinary staff includes design professionals in all engineering disciplines. Remedial design activities provided to clients include:

- Project planning and cost control
- Bench/pilot-scale treatability studies
- Field data acquisition and verification
- Preliminary, intermediate, and final design

plans and specifications

- Contractor screening and pre qualifications
- Construction and operation reviews of design
- Health and safety considerations
- Construction scheduling
- Value engineering
- Community relations
- Construction management
- Facility testing
- Startup and operator training
- Project closeout and documentation



Hydrocarbon Remedial Technologies



During the first step of the Remediation process, resources are allocated in an orderly and systematic fashion that will assist in maximizing benefits, setting priorities, providing a clear picture of the problems and potential risks and liabilities involved, and outlining some tentative solutions to these problems.

Remedial Alternatives are analyzed and compared to select the best technology for the site. Once a Remedial Action is selected, a detailed report is prepared. The final design considers all aspects of the problem and the client's needs. Close attention is given to costs and labor requirements and to maintaining a design capable of meeting all regulations and of minimizing the client's future liabilities.

Passive Remediation Methods

Non-Toxic Biodegradable Ionized Colloid Treatment

Ionized micelle suspension treatment involves introducing sub-microscopic particles called micelles into groundwater, soil or contaminated water to bind chemical contaminants such as oil or other highly viscous materials into colloidal suspensions.

The mechanism by which the treatment operates is based on the polar nature of the micelles. Each end of a micelle has an opposite charge, producing a random motion of micelles when in solution. One end is hydrophilic (having an affinity for water) while the other is hydrophobic (antagonistic to water). These electrically charged particles continue to repel each other in a ceaseless random movement. This action is simultaneously multiplied by billions of other micelles, so that the target material is dispersed into individual particles that do not have the ability to redeposit. Biodegradation employs the natural abilities of microorganisms as degradation machines, utilizing hydrocarbon contaminants as a nutrient source. With Soil Pacific Inc. (SPI) proprietary lonized Solution, the natural attenuation of contaminants is accelerated as contaminants are separated into small particles. Microbes at a site or microbes introduced to the site are stimulated the organic contaminants in much the same way we digest sugar.

The hydrocarbons are therefore degraded and transformed into carbon dioxide, oxygen and water molecules. Non-toxic biodegradable micelle suspension treatment provides an effective, low cost, passive option for the treatment of petroleum hydrocarbon contaminants.

The procedure begins with a site assessment. SPI's hydrogeologists and chemists determine the type and extent of contamination. Samples are then taken from the site and a brief laboratory study is conducted to determine the most appropriate treatment. SPI's microbiologists and chemical engineers conduct biodegradability and physical/chemical treatment studies to determine the optimal remedial action. The use of lonized Solution treatment can mean savings of 50 to 80% over other treatment methods, should the site assessment and laboratory studies merit its application.

Passive Remediation Methods

Non-Toxic Biodegradable Ionized Colloid Treatment

Extremely cost-effective - The natural attenuation is accelerated; incinerators and other expensive equipment are not needed. Excavation and hauling costs are eliminated.

■ Complete destruction of contaminants the ultimate disposal technology; microorganisms present in the environment convert the compounds to carbon dioxide, water and harmless biomass. Complete destruction ends your liability.

■ A natural process - SPI's formulation catalyzes the natural decay of the contaminating compounds by a thousand-fold or more.









■ Works with other technologies - used with other treatment methods, such as vapor extraction, ionized solution treatment significantly reduces the length of time and costs required for cleanup.

■ Minimal site disturbance - the process takes place below ground for cleanup of contaminated groundwater and soil; only non-intrusive covered wells are required on site.

■ **Flexible** – can be customized to your individual site specifications, contaminant, and location.

This technology has been successfully implemented in many hydrocarbon-contaminated sites by SPI. Our staff has years of experience in the treatment of hazardous wastes with the most cost-effective technologies.



Passive Remediation Methods

In Situ Chemical Oxidation

In-situ chemical remediation involves introducing an oxygen-release material (ORM) into the subsurface to promote aerobic biodegradation of low concentrations of petroleum hydrocarbon compounds. Microbe slurry and nutrient mix are often added in conjunction with the ORM to increase effectiveness. The ORM is activated by moisture and releases oxygen incrementally over time. ORMs are typically injected under pressure into the subsurface in a grid pattern over the proposed treatment area via direct push technology. In-situ chemical oxidation provides an effective, passive option for the treatment of relatively low concentration petroleum hydrocarbon contaminants. Site conditions should be carefully evaluated, as toxic by products can be formed.









Passive Venting

Passive venting remediation involves installing venting wells in the treatment area, open to the atmosphere and screened in the contaminated zone. Passive venting allows exchange of soil vapor and atmospheric air during diurnal fluctuations in barometric pressure due to changes in weather, thereby enhancing natural attenuation of contaminants. The effectiveness of passive venting is dependent on climatic conditions and is generally appropriate for site where high production rates are not required.

Active Remediation Methods

Remedial Soil Excavation

Remedial excavation involves excavating contaminated soil and transporting it offsite for treatment. Removing contaminated soil from a site prevents downward migration of contaminants, cutting off potential contamination sources. Remedial excavations are most effective when soil contamination is limited to small lateral areas and/or relatively shallow depths





In-Situ Vapor Extraction

In-situ soil vapor extraction (SVE) remediation involves removing vaporphase hydrocarbon contaminants from soil via a blower-induced vacuum through one or more wells installed into the vadose zone. Extracted air is then treated, through carbon adsorption or thermal oxidation, for instance, prior to being released into the atmosphere. Insitu soil vapor extraction is an effective remedial method for the treatment of high concentration contaminant plumes in the vadose zone.

In-Situ Air Sparging

In-situ air sparging remediation involves injecting contaminant-free air into the saturated zone to facilitate a phase transfer of hydrocarbons from a dissolved phase to a vapor phase. The resulting air is then vented through the unsaturated zone. Air sparging can be conducted with vertically or horizontally oriented wells and is typically used in conjunction with another remedial method such as soil vapor extraction or groundwater pump and treat. When used to enhance other remedial methods, in-situ air sparging is an effective method for the treatment of contaminated groundwater.



Active Remediation Methods

Groundwater Pump and Treat

Groundwater pump and treat remediation involves pumping impacted groundwater from monitoring wells for treatment. Groundwater can be treated onsite by activated carbon filtration then discharged into local storm drains or the groundwater can be transported offsite for treatment. Pump and treat remediation is typically implemented on sites where contaminant levels are very high or to control the offsite migration of contaminated groundwater. Pump and treat remediation is highly effective in removing high concentration contaminants from groundwater.



In-Situ High Vacuum Dual-Phase Extraction

In-situ high-vacuum dual-phase extraction remediation is a combination of soil vapor extraction and groundwater pump and treat. A blower-induced vacuum is used to extract vapor-phase contaminants from wells installed into the vadose and/or vapor-phase contaminants or impacted groundwater from wells installed into the saturated zone simultaneously. The depth of a stinger controls whether vapor or groundwater is extracted from wells. The effectiveness of HVDPE is often enhanced by air sparging. HVDPE remediation is highly effective in removing free product or high-concentration contaminants from the subsurface.





Geotechnical Services

Geotechnical Services

Soil and Foundation Engineering

- Deep Foundations Drilled Piers (Caissons)
- Piling
- Quality Control Requirements
- Load Tests
- Monitoring Installation
- Construction Specifications
- Ground Anchors
- Tiebacks
- Helical Anchors

Geotechnical Engineering

Earthwork Monitoring

Landslide Abatement

- Soil Stabilization Geosynthetics/Geotextiles
- French Drains
- Soil Nailing
- In-place Soil Reinforcement Technique Design
- Construction Plans and Specifications

Retaining Structures

Site Feasibility Study Faulting Investigation Engineering Geology Geology Mapping Slope Stability

- Analysis of Steep Slopes in Residual Soils
- Geosynthetic Reinforcement

Concrete Placement Observation

Concrete Cylinder Casting and Testing

Soil Testing

Foundation Investigation

Distress Evaluation

Masonry and Welding Field Observation

Construction Management Support







Management Portfolio

Management Portfolio

Soil Pacific Inc., with a wide variety of multi-disciplinary experience, believes its primary strength lies in the quality and diversity of its staff and their extensive practical and academic background. This section provides summary information on the key personnel who make up our multi-disciplinary team.

Yones Kabir, Ph.D., R.E.A.I, R.E.A. II,	President
David Bramwell C.E.G.,	Engineering Geologist
Abdel Al-Omar, MSc. P.E.	Professional Engineer
Hoss Eftekhari, BSc, P.E.	Professional Engineer
Jeff Schymanietz, CEG	Environmental Engineer Staff
Fari Rastegari, R.E.A.	Engineer
Masoud Javadi, B.Sc	Staff Environmental Engineer
Alireza Shahdoust, B.Sc.	Staff Engineer
Arash Taherian, B.Sc., F.E.	Staff Engineer
Nima Kabir, MD	Project Specialist
Meelad Navidi, M.Sc	Project Engineer
Fari Kabir BSc.	Project Engineer

Key Personnel

YONES KABIR, Ph.D., R.E.A. I, R.E.A. II, R.E.P.

Dr. Yones Kabir has more than thirty years experience in geotechnical, soil and environmental engineering, and consulting. He founded Soil Pacific Inc. in 1986 as a geotechnical and environmental consulting company. Dr. Kabir plays a vital role in management, consulting engineering and coordination of the activities of our team with strong commitment to excellence and quality performance.

EXPERIENCE

1986-Present, Soil Pacific Inc. Orange, California

Part-time instructor in "Geotechnology." Provide consulting services in the Environmental and Geotechnical areas.

Planned, directed and managed the activities of the engineering team of Soil Pacific Inc.

1985-1986 GeoWest Soil Consulting, Costa Mesa, California.

Senior Geologist, conducted and directed studies and projects in the following areas:

Geotechnical Engineering Environmental Engineering Seismic Hazards Groundwater Study Soil Testing and Soil Engineering

1978-1985 Laboratory of Geodynamics, Paris XI University

Research assistant and member of research team for study of tectonic and structural geology in southeast France.

1976-1978 Geological Survey Senior Geologist and field supervisor Structural geology

1974-1976 Geological Survey Field geologist Geological mapping, and stratigraphy of geologic quadrangles.

EDUCATION

Post Doctorate in Structural Geology & Seismo-tectonics Doctorate in Structural Geology M.Sc. in Structural Analysis and Tectonics B.Sc. in Geology

HONORS & SCHOLARSHIPS

5 years scholarship from "Institute Francaise du Petrol," Paris, France.

4 years of scholarship during B.Sc. Study.

PATENTS

Method for Clean-up of an Underground Plume Contaminated with Hydrocarbon Leakage, and the Like. (Pending)

PUBLICATIONS

Available upon request.

Abdel A-Omar, MSc., P.E.

Mr. Omar has been associated with Soil Pacific Inc., since 1988. He is a principal Engineer in the Orange Office, and works on projects company-wide.

Within a highly specialized niche of professional engineering practice, Mr. Omar provides a broad range of investigative and analytical expertise. He has extensive experience in civil and environmental engineering, including groundwater and hydrogeologic assessments. Design and construction management of water supply, extraction, and monitoring wells are an integral part of his professional activities. He has been extensively involved in technical direction, management, and coordination of all aspects of multi-disciplinary projects in civil and geo-environmental engineering for nearly 30 years. Additional duties include proposal writing and presentation, client interface/negotiation, scheduling and cost estimating, technical presentations and expert testimony.

EXPERIENCE

His demonstrated experience in the conduct and management of numerous comprehensive studies and investigations is reflected in the following projects:

Directed investigations for complicated contaminated site with commingled plumes in the City of Woodland hills. His professional services include delineation of lateral and vertical extent of BTEX, TCA and PCA chemicals in the subsurface environment in accordance with the Los Angeles Regional Water Quality Control Board (LARWQCB) regulations, supervision of drilling & installation of monitoring wells, water quality sampling and analysis and regulatory liaison/compliance.

Evaluation of pollution potential due to Red Tide in Persian Gulf (Arab Emirats/Dubai) and Environmental Control of sewage disposal to the sea.

Directed investigations for devising interim and long term solutions to the nitrate contamination problems pertaining to the city of Norco, California well water identification, screening and evaluation of feasible alternatives including drilling of new wells and design of wellhead treatment (dentrification) system for well water.



soil Pacific Inc.

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