

APPENDIX

STATEMENT OF QUALIFICATIONS

RESUMES OF KEY PERSONNEL

ENVIRONMENTAL RISK SERVICES EXPERIENCE

1. DESCRIPTION OF ORGANIZATION, MANAGEMENT AND TEAM MEMBERS

ENVIRONMENTAL RISK SERVICES CORPORATION (ERS)

By design, ERS combines high-level environmental consulting services with insurance brokerage services to identify, manage, and resolve risk. We help our clients minimize risk and maximize opportunities with strategic management and resolution of environmental liabilities. It is imperative to fully understand the Benicia Arsenal's environmental conditions ((such as Munitions and Explosives of Concern (MEC), Unexploded Ordnance (UXO), Hazardous, Toxic and Radioactive Waste (HTRW), Chemical Warfare Material (CWM)) in order to allocate risks and liabilities, determine environmental management options, and ultimately develop an engineering cost estimate the Cities ability to negotiate a *Voluntary Consent Agreement* will be compromised. Therefore, we see our responsibility to provide the City with the necessary information that is needed to successfully negotiate a *Voluntary Consent Agreement*, or another structured solution that allows the City to manage risks, and begin cleanup and redevelopment in a timely fashion.

In several cases, the Department of Defense (DoD) has recommended that ERS assist with assisting various parties, such as regulators, cities, military and developers in resolving technical issues in order to find an environmental solutions. These failing efforts were the result of others making unrealistic and uncoordinated assumptions about the site conditions, risks, liabilities, the military's willingness to negotiate and fund cleanup, land use plans, and developer flexibility. A profound lack of coordination of the various interests, or deferring too much leadership to the development community can pose significant, and at times insurmountable, obstacles to successful negotiations.

We know there are several ways to solve a problem and that our clients constantly manage coordinated as well as competing goals and interests that are inherent in a high-profile public project. By working closely with our clients, we help the project to proceed and evolve as needed to optimize economic and political success. We provide our clients with technical environmental services and major asset redevelopment services throughout the United States. Our clients include industry, municipalities, real estate developers, attorneys, government, and quasi-governmental organizations such as ports.

The following is a list of key management and technical personnel at ERS:

Mark J. O'Brien - M.Sc., President

PROGRAM MANAGER AND RISK ANALYSIS MANAGER:

Mr. O'Brien brings over 20 years' experience assessing and managing risks associated with major port operations, dredging, Brownfields, and DoD facilities for Base Realignment and Closure (BRAC) projects involving chemical and radioactive contamination. He advises the Institute for Defense Analysis (IDA) and Chaired the committee dealing with contaminated military properties. Mark was responsible for

the nation's first early transfer of contaminated property to the private sector. Mark also is an environmental insurance broker.

Sydney University of Technology: B.A. Physiology

University of California-Berkeley: MSc. Human Bio-dynamics

U.C. Berkeley: U.C. Santa Barbara: Ph.D. (candidate) Env. Science/Nuclear Engineering

Steven I. Michelson, R.G. - Principal Geologist:

TECHNICAL PROJECT MANAGER:

Mr. Michelson brings over 20 years experiences applying technical, economic, and regulatory analysis to the management and closure of environmental liabilities at industrial, port, mining, and military facilities, including BRAC sites. He has addressed environmental liabilities including chemical, radiation, and UXO/MEC contamination. He has particular expertise with NRDA and assessing hydrogeologic conditions and the interaction between ground water and surface water, including coastal aquifers.

Lehigh University: B.S. Geology and B.S. Civil Engineering

Peter D. Weiler, Ph.D., Senior Geophysicist

MEC/UXO INVESTIGATION MANAGER:

Dr. Weiler brings over 15 years applying geophysical techniques to environmental and energy problems around the world. He investigates hydrogeological and geophysical conditions at BRAC, CERCLA, Brownfields, landfills, and industrial facilities. His experience includes investigating radiation contamination. His geophysical training and experience has proven to be well adapted to the identification and location of UXO/MEC.

University of California-Santa Cruz: Ph.D. Earth Sciences,

James F. Durkin, CHg., Senior Hydrogeologist

SOIL AND GROUND WATER INVESTIGATION MANAGER

Mr. Durkin has over 20 years' experience managing soil and ground water investigations and remediation at sites in Northern California and Hawaii. Mr. Durkin conducts aquifer tests, analyzes ground water basins, and prepares and manages monitoring plans. Mr. Durkin has also planned and completed remedial actions at dozens of sites including former fuel facilities and chemical plants.

Cornell University: BA Geological Science

Dan Holmes, M.L.I.S., Senior Geographer and Research Librarian

INFORMATION MANAGER:

Mr. Holmes has substantial experience with library management and planning, information research, and environmental analysis. He brings a diversity of experience in hydrology, water resources, geomorphology, city planning, and historical geography. He has performed many literature and archive research projects, with emphasis on interpreting aerial photographs, public records research, and developing digital and web-based libraries. M.A. University of California – Berkeley, Geography

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2. ORGANIZATION QUALIFICATIONS

ERS QUALIFICATIONS:

ERS has been involved in the development, quantification, negotiation, and implementation of many transfers of military installations. ERS's primary role at these sites has been to represent the interest of the property recipient such as developers and the Local Reuse Agency (LRA). ERS has served both as the Program Manager and Advisor to several LRAs and developers negotiating the voluntary consent agreements to support the transfer of military installations and associated funding for the remediation of environmental contamination. ERS has participated at various levels in the transfer and remediation of many military installations. In all cases where ERS has served as the Program Manager and or Technical Advisor, the military base has successfully transferred, with the necessary funding to complete the remediation of

Military Installation	ERS Role	Early Transfer Status
Fleet Industrial Supply Center Oakland	Program/Technical Manager	Transferred with Remedial Compensation
Louisville Naval Ordnance Station	Program/Technical Manager	Transferred with Remedial Compensation
Naval Communications Center (INS) Stockton	Program/Technical Manager	Transferred with Remedial Compensation
Oakland Army Base	Program/Technical Manager	Transferred with Remedial Compensation
Point Molate Naval Fuel Depot	Program/Technical Advisor	Transferred with Remedial Compensation
Rough and Ready Island Navy Supply Center	Program/Technical Manager	Transferred with Remedial Compensation
Selfridge Air Force Base (Sebille Manor)	Program/Technical Manager	Transferred with Remedial Compensation
Badger Military Badger Military Ammunition Plant	Program Advisor	Transfer pending
Camp Bonneville Army Base	Program/Technical Manager	Transferred with Remedial Compensation
Concord Naval Weapons Stations	Technical Advisor	Transfer pending
Fitzsimmons Military Medical Center	Technical Advisor	Transferred with Remedial Compensation
Ft. McClellan Military Base	Technical Advisor	Transferred with Remedial Compensation
Guam Naval Base	Technical Advisor	Transferred with Remedial Compensation
Hunters Point Naval Shipyard	Technical Advisor	Transferred with Remedial Compensation
Mare Island Naval Shipyard Legacy Partners	Program Manager	Transferred with Remedial Compensation
Mare Island Naval Shipyard Weston Solutions	Program Manager	Transferred with Remedial Compensation
Presidio Army Base	Advisor	Transferred with Remedial Compensation
Stockton Army Base	Advisor	Transferred with Remedial Compensation

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Ft. McClellan Military Base	Technical Advisor	Transferred with Remedial Compensation
Guam Naval Base	Technical Advisor	Transferred with Remedial Compensation
Hunters Point Naval Shipyard	Technical Advisor	Transferred with Remedial Compensation
Mare Island Naval Shipyard Legacy Partners	Program Manager	Transferred with Remedial Compensation
Mare Island Naval Shipyard Weston Solutions	Program Manager	Transferred with Remedial Compensation
Presidio Army Base	Advisor	Transferred with Remedial Compensation
Stockton Army Base	Advisor	Transferred with Remedial Compensation

the military's contamination.

Following the successful transfers identified above, ERS has served as the program manager implementing the privatized cleanup funded by voluntary consent agreements at the following early transfer installations:

- **Fleet Industrial Supply Center**

Mr. Mark O'Brien led the LRA for the Port of Oakland for the early transfer of FISC, managed the privatized cleanup, and brought the installation to complete closure with the state and federal regulatory agencies. Not only was FISC-Oakland the first early transfer of a military installation, it is also the first early transfer where all of the environmental costs were paid for by the military within a voluntary consent agreement. All of the installation restoration sites have been remediated and reached regulatory closure. Development of the entire base has been completed. This facility was closed on schedule and under budget.

- **Rough and Ready Island Navy Supply Center**

ERS served as the Program manager representing the LRA throughout the negotiation of the early transfer of the Rough and Ready Island Navy Supply Center, which was formerly a Navy Ordnance Depot. The property, consisting of an entire island, is currently valued at approximately one billion dollars. Our role included evaluating the environmental liabilities, quantifying risks, negotiating the voluntary consent agreements, developing the remedial funding agreements, such as and Environmental Service Cooperative Agreement (ESCA) with the military, negotiating remediation approaches with the regulatory agencies, representing the transaction to the Governor's office, preparing the various transaction documents, negotiating the various land use covenants and institutional controls, and securing appropriate insurance that transferred risk away from the LRA.

Following the negotiation of the ESCA, ERS has continued as Program Manager responsible for the privatized cleanup of the property and complying with all Navy and insurance reporting requirements. In addition, we continue to support the LRA with a variety of issues related to redevelopment and infrastructure improvements. To date, all remedial sites have been closed well ahead of schedule and well below budget.

- **Naval Communications Center Firing Range**

ERS was the Program manager representing the Port of Stockton for the early transfer of the INS property, which is owned by the military. Our role includes evaluating the environmental liabilities, quantifying risks, negotiating the voluntary consent agreements with the military, negotiating remediation approaches with the regulatory agencies, representing the transaction to the Governor's office, preparing the necessary transaction documents, negotiating the various land use covenants and institutional controls, and securing the appropriate level of insurance. As the Program Manager; ERS is responsible for the privatized cleanup of the property and complying with all military and insurance reporting requirements.

ERS personnel bring a wealth of experience characterizing and remediating environmental liabilities at many other military installations. These installations posed environmental liabilities associated with flight-line contamination with petroleum hydrocarbons and chlorinated solvents, landfills, perchlorate contamination in ground water, radiation, UXO/MEC, and chemical and biological warfare agents. These military facilities include:

- Riverbank Army Ammunition Plant
- Stockton Army Ordnance Depot
- Sharp Army Depot
- Umatilla Army Ordnance Depot
- Castle Air Force Base
- Edwards Air Force Base
- Hamilton Air Force Base
- Luke Air Force Base
- Mather Air Force Base
- McClellan Air Force Base
- Norton Air Force Base
- Otis Air Force Base
- Pease Air Force Base
- Point Arena Naval Air Station
- Travis Air Force Base
- Westover Air Force Base
- Mare Island Naval Shipyard

Overall, ERS offers significant experience characterizing, remediating, and transferring a wide range of environmental liabilities at over 35 Army, Navy, Air Force, and Marine bases.

Due to the nature of the operations at military installations, many of the environmental liabilities must be managed under RCRA Corrective Action protocols. For example, underground storage tanks and landfills (solid waste management units) must be investigated, remediated, and closed pursuant to RCRA. ERS offers considerable experience with RCRA at industrial and military facilities.

ERS offers significant program management and hands-on investigation and remediation experience from a variety of CERCLA and RCRA sites with HTRW liabilities in Texas and around the country. We have investigated, remediated, supported the assessments of human health and ecological risks, evaluated short and long term risks and liabilities and associated risk-transfer mechanisms. An example timeline of investigation, remediation, and closure of an HTRW site at an early transfer military installation is attached

We understand that RCRA and CERCLA sites typically involve increased public scrutiny and media exposure. We have investigated and/or remediated a variety of CERCLA and RCRA sites, including U.S. military installations (Army, Navy, Air Force) with chemical, radiation, and MEC/UXO contamination, U.S. DOE facilities with radiation contamination, industrial facilities (manufacturing, petrochemical, wood-treating, high-tech, plating, etc.) with chemical contamination, and mines (gold, uranium), and landfills (industrial, military, and municipal). We have addressed chemicals of concern ranging from organics (e.g., chlorinated solvents and pesticides), to metals (e.g., mercury, lead, arsenic, hexavalent chromium), to radioactive substances (e.g., alpha, beta, gamma emitters), to residues from chemical warfare agents and unexploded ordinance (UXO).

We also bring experience characterizing UXO/MEC environmental liabilities, evaluating risk and associated risk transfer mechanisms, and/or providing planning for UXO/MEC removal at Ft. McClellan, Riverbank Army Ammunition Plant, Sharp Army Depot, Umatilla Army Ordnance Depot, Stockton Army Ordnance Depot, Naval Communications Center Firing Range, Rough and Ready Island, and Travis, Castle, Edwards, Mather, and Luke Air Force Bases.

At all facilities, ERS offers the expected suite of site characterization experience and services, ranging from investigation work plan preparation and implementation, drilling, sampling, monitor well construction, surface water and ground water sampling, data QA/QC, data evaluation, and technical report preparation.

ERS CAPABILITIES:

ERS is a multidisciplinary environmental science and engineering consulting company specializing precisely in the requested scope of services with experience unsurpassed in the environmental consulting marketplace. We provide expert technical and strategic services to public and private entities seeking to identify, evaluate, manage, reduce, and/or leverage environmental risks and liabilities, including those associated with the early transfer of BRAC military installations. We bring the full range of expertise needed to expertly and effectively manage the transfer, voluntary consent agreements and privatized cleanup process.

The skills necessary to meet the needs of our clients in the development and negotiation of voluntary consent agreements, transfer and privatized remediation process can be generally categorized as technical, management, risk analysis, and strategic. We know that all these skills require careful, accurate, direct, clear, and routine written and oral communications with a wide variety of people, including the responsible parties, attorneys, military, insurance company, regulators, and the public.

Our experience continues to be successfully applied to a variety of projects, including:

- Early transfer of Base Realignment and Closure (BRAC) military installations
- Superfund investigations, remediation, and liability closure (CERCLA)
- RCRA corrective actions and closure
- Real estate transaction and redevelopment (e.g., Brownfields)
- Ecological assessments
- Permitting
- Risk analysis, management, and transfer
- Land use planning and water resource planning
- Natural resource damage assessment (NRDA) and resource equivalency analysis (REA)
- Aquifer storage and recovery (ASR)

The relevance of our skills begins with the academic training of our staff, continues with the professional technical experience obtained at numerous military and industrial facilities, and is directed by senior project and program managers with experience at several large military

installations. The average environmental consulting experience offered by senior members of ERS is approximately 25 years.

ERS personnel bring considerable experience working on state and federal Superfund and RCRA sites across the country. We have performed, supported, and/or produced remedial investigation and feasibility studies (RI/FS), human and ecological risk assessments, remedial action plans (RAP), records of decision (ROD), remedial design plans, and remediation completion reports. ERS routinely prepares National Contingency Plan (NCP)-consistent documents for the investigation, remediation, and closure of BRAC military installations and industrial sites.

ERS Technical Capability:

In addition to the fundamental in-depth knowledge and extensive experience we have with military installations, we also bring extensive technical, management, and risk analysis expertise that is needed to resolve the variety of environmental liabilities. Our experience with these liabilities ranges from petroleum hydrocarbons released from underground tanks and associated pipelines, to refueling facilities along runways, maintenance facilities, to fire training areas and burn pits, to ammunition manufacturing facilities, to munitions bunkers, and to landfills with UXO/MEC, industrial, and radioactive wastes.

These projects require a wide variety technical expertise and professional experience that can be distilled into a few general core services, including:

- Investigation and remediation of contaminated soil and ground water
- Environmental liability identification and resolution
- Risk assessment, transfer, and insurance acquisition support
- Regulatory negotiations, public representation, and permitting
- Remediation engineering and construction management

ERS technical skills include the relevant scientific, engineering, and economic arenas. Our technical services and skills encompass:

- Hydrology, Geography
- Geophysics, Geochemistry
- Hydrogeology
- Ecology and biology and wetlands
- Ecological risk assessment support
- Human health risk assessment
- Resource equivalency analysis
- Bench scale and pilot scale testing
- Remediation engineering
- Construction management
- Ground water modeling
- Surface water modeling
- Geochemistry modeling
- Water resource planning support
- Land use planning support
- Public communications
- Expert witness and testimony
- Graphic Information Systems (GIS)
- Database design and management
- Web-based electronic library

Scientifically, ERS offers geologists with experience in hydrogeology, hydrology, inorganic and organic geochemistry, soil chemistry, geophysics, and structural geology. These skill sets

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to geochemical modeling, ground water modeling, chemical fate and transport modeling, radiation wastes, isotope chemistry, and geophysical investigations designed specifically to identify MEC and UXO. We have particular expertise identifying munitions and evaluating their short and long term fate and transport and risks.

Engineering skills cover a breadth of remediation design needs, ranging from simple digging and straightforward excavation and removal efforts, to vapor recovery systems, to advanced biological attenuation, to in situ technologies such as biological fixation of hexavalent chromium in ground water or chemical fixation of heavy metals in soil, to hazardous and non-hazardous waste removal, to landfill caps.

Engineers and scientists also bring considerable experience to facility demolition projects. In demolition, the integrity of the facility must be assessed and the waste streams to be managed must be identified. These waste streams include asbestos and lead based paint, associated with the building materials, and tanks, pipelines, transformers, and ballasts associated with building infrastructure. Appropriate waste management, handling, transport, and disposal plans are prepared to support the identification of appropriate subcontractors. Construction management expertise is readily applicable to demolition management.

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Economic analysis is critical to the decision-making, selection, and management process, as well as the design and scaling of mitigation actions, if required. We are fully versed and experienced with cost estimation, financial modeling, present and future engineering cost estimates, and the selection of appropriate metrics when evaluating mitigation alternatives.

Management Capability

Management skills include program management, project management, technical management, information management, and subcontractor management.

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Program Management

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Program management is a skill set and experience well represented by ERS and the project team assembled for the Benicia Arsenal. The role of the Program Manager is to coordinate and manage the various voluntary consent agreements in a manner consistent with the strategic goals, scheduling limitations, and financial constraints of the client. The program Manager must also be able to develop appropriate remedial strategies and resulting financial impacts with respect to remediation. Additionally the Program Manager must integrate and communicate well and routinely with the client, legal counsel, technical and project managers, regulators, the public, and the military. This role is critical to the development of numerous documents and agreements and to the success of the early transfer process.

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bring considerable program management expertise derived from our high level involvement at several military installations (see above lists). Unlike other firms, we also bring hands-on knowledge of the program management effort from the perspective of the Arsenal because the ERS program manager previously lead an LRA. Finally, we bring comprehensive program management experience obtained from other complex projects,

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such as Superfund/CERCLA, natural resource damage assessment programs at large industrial facilities, and aquifer storage and recovery feasibility studies.

- **Project Management**

Project management begins with the scoping of the project's goals, purpose, objectives, and discrete elements, tasks, or steps required through completion. The project management responsibilities continue directly to team creation, organization, direction, scheduling, resource loading, and cost accounting. Assembling the team with necessary technical and communication skills is critical to the overall success of the project. Our scheduling and accounting systems routinely track in near real time the costs versus percent complete to assure timely project completion and to identify potential cost/schedule overruns.

- **Technical Management**

Technical Management runs in parallel with Project Management, to assure that the end product meets all required technical objectives, and data quantity and quality objectives. We place only senior individuals with the right mix of technical experience, maturity, and people management skills needed to meet the objectives of the project, and with the strategic experience required to meet the goals of the program.

- **Information Management**

Information management is an increasingly vital technical skill requiring rigorous quality assurance and quality control tasks, data base design and management, and implementation of internal and public information management systems. ERS brings specific expertise in this regard ranging from public information research and analysis, aerial photo interpretation, data compilation, and electronic data management, interface, keyword search, and presentation systems using such vectors as geographical information systems (GIS), web-based file transfer protocols (ftp), and electronic libraries.

- **Subcontractor Management**

Subcontractor management begins with the scoping of the project's goals, purpose, and objectives, continues through the request for qualifications/proposal stage, through contracting, insurance verification, and subcontractor performance monitoring. We have considerable experience working with and directly managing subcontractors performing services such as laboratory analysis, drilling, excavation, construction, remediation, and hazardous waste transport and disposal. Our accounting systems are designed to track subcontractor costs versus percent complete to assure timely project completion and to identify potential cost/schedule overruns.

ERS Risk Analysis Capability

Once the environmental liabilities are characterized to facilitate transfer and or voluntary consent agreements, we will analyze the suite of risks posed by the environmental issues at the Benicia Arsenal. Risk analysis is critical to identify appropriate risk management mechanisms that will reduce the client's exposure, address concerns expressed by the government and

military, and add certainty to the entire early transfer process and subsequent privatized cleanup.

Unlike all other environmental consulting firms, ERS has a sister company, Quantitative Risk and Insurance Services (QRS), which is a licensed and bonded environmental insurance brokerage company (#0D87970). Together, ERS and QRS provide our clients a coordinated blend of environmental engineering, scientific, and risk analysis services coupled with specialized insurance brokerage services. In short, we reduce risk by adding certainty.

Our risk analysis integrates our expert knowledge of the environmental conditions and the needs of the transfer and supporting agreements with knowledge of the insurance marketplace and our client's tolerance for risk. Modeling environmental risk scenarios allows more informed decisions about costs, benefits, risk management options, and negotiating the remedial costs. As a result, our clients receive superior representation in the underwriting process and the most favorable insurance policy terms, conditions, and premiums. While insurance may not always be a complete solution for our clients, it is a powerful tool to manage exposure to environmental liabilities.

QRS core services include:

- Environmental liability management, Finite liability transfer,
- Insurance brokerage and policy negotiations on such products as pollution liability, remediation cost cap, and blended insurance programs,
- Insurance placement, policy maintenance, and claims representation and support.

3. REFERENCES, RELATED EXPERIENCE AND EXAMPLES OF WORK

ERS has supported the development and implementation of many voluntary consent agreements at military installations. Our primary role is always to represent the interests of our client. Depending on the property, our services ranged from overall program management, environmental and engineering assessment, remedial cost development, advisory and strategic, risk analysis, and insurance brokerage. Our involvement with military bases has included characterization and risk assessment, strategy development, structuring various agreements between multiple parties, site transfer, and continued through cost negotiations, privatized cleanup, closure, and redevelopment. The following briefly describes our role in some military properties.

- **Fleet Industrial Supply Center**
ERS served as the Program Manager and lead the LRA for the Port of Oakland throughout the early transfer process, funding negotiation, risk analysis, insurance acquisition, privatized cleanup, and redevelopment. The property has been successfully transferred.
- **Louisville Naval Ordnance Station**
ERS served as the Program Manager for the LRA throughout the site characterization, transfer, financial negotiations and agreements, risk analysis, and insurance acquisition. The property has successfully transferred.

- **Oakland Army Base**

ERS served as the Program Manager for the Port of Oakland throughout the early transfer process, financial negotiations, risk analysis, insurance acquisition, and privatized cleanup. The property has successfully transferred.

- **Rough and Ready Island Navy Supply Annex**

ERS served as the Program Manager for the Port of Stockton throughout the transfer process, financial quantification and negotiation, risk analysis, and insurance acquisition. We are currently implementing the cleanup and assisting with the redevelopment of the property. The property has been successfully transferred.

- **Concord Naval Weapons Stations**

ERS assessed the Cities environmental liabilities through the investigation of the site. Our role was to assist the City develop a risk analysis associated with environmental liabilities.

- **Stockton INS**

ERS served as the Program Manager for the Port of Stockton throughout the characterization, voluntary consent agreement development, early transfer process, financial quantification and negotiation, risk analysis, and insurance options. ERS will also manage the privatized cleanup and assist with redevelopment.

- **Fitzsimmons Army Medical Center, Camp Bonneville – Army, Presidio Army Base, Badger Army Ammunition Plant Hunters Point Naval Shipyard, El Toro Marine Corps Air Station**

ERS advised the LRA on risk management and provided liability insurance placement. These properties have been successfully transferred.

- **Mare Island Naval Shipyard**

ERS advised the developers throughout the characterization, voluntary consent agreement development, early transfer process, financial quantification and negotiation, risk analysis, and insurance options. The property has successfully transferred.

4. REFERENCES, RELATED EXPERIENCE AND EXAMPLES OF WORK

The following lists relevant references for ERS.

- Charles Foster - Former Executive Director, Port of Oakland 925.997.0185
- Richard Ascheris - Executive Director, Port of Stockton 209.946.0246
- Isabella Alasti – Senior Legal Counsel DTSC 714.484.5405
- Michael Waters –Senior Legal Counsel Department of the Navy 619.532.2312
- Ted Mankowski - Engineering Manager, Lawrence Livermore Laboratory 510.495.2012
- Jose Salcedo-Office of Military Facilities DTSC 916.255.3741
- Dr. Phillip Giovinnini-Senior Scientist RWQCB 916.464.4812
- David Knisley - BRAC Legal Counsel 617.367.3990

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- John Briscoe - Briscoe Investor & Bazel LLP 415.402.2700
 - Wayne Arny - Former Deputy Assistant Secretary of the Navy 703.697.6811
 - Bill Baron - City Manager Clark County 360.397.2000
 - William Cassidy - Former Deputy Assistant Secretary of the Navy, 202.255.2273
 - Robert Davenport - Former Army Office of Legal Counsel 703.693.3665
 - Howard Kelsey - Former Director of Navy Real Estate 202.685.9198
 - Gordon Palmer - City Manager, City of Stockton 290.937.8212
 - Miki Schneider - Director of Joint Powers Authority, Fort McClellan 256.236.2011
 - Harry Zimmerman - Former Navy Director of BRAC 571.216.6716

Mark J. O'Brien

CEO

Mr. O'Brien is the Chief Executive Officer (CEO) of *Environmental Risk Services Corporation Inc.* (ERS; Inc.) ERS; Inc. specializes in engineering and environmental consulting to both government and private entities. ERS; Inc. consults in multiple disciplines including geology, geophysics, hydrology, engineering, toxicology and physiology. ERS; Inc. also provides brokerage services for environmentally impaired property and risk based transactions and holds both surplus lines and special lines licenses. ERS; Inc. is *unique* in its ability to provide its clients with fully integrated solutions to assessing and quantifying risk. ERS; Inc. provides program management, legal support; engineering, environmental, transactional and insurance consulting services to support our clients.

Mr. O'Brien has extensive experience resolving risk-based issues at military properties around the country and the world. He has served as a consultant to local governments and Fortune 500 companies. Mr. O'Brien has been an advisor to the Institute for Defense Analysis (IDA) through the Department of Defense (DOD) and has served as Chairman.

Mr. O'Brien was responsible for the development of a compartmentalized fugacity model based upon mass balance mathematical quantification to determine risk, which has resulted in supporting conveyance of transactional risk. Mr. O'Brien also serves as an advisor to both private industry and government entities including airports, maritime ports and military facilities around the country.

Mr. O'Brien was Senior Vice President for Marsh & McLennan and specialized in the modeling, quantification, and transfer of liabilities associated with transactional risk. Mr. O'Brien also worked with the National Economic Research Associates (NERA). Mr. O'Brien has also served as a manager for major U.S. Ports. As such, Mr. O'Brien was responsible for supporting a \$1 billion capital development program, merger and acquisitions, and significant real estate transactions.

PROFESSIONAL WORK HISTORY

Environmental Risk Services, Inc., Chief Executive Officer
Marsh & McLennan, Senior Vice President
National Economic Research Associates, Senior Vice President
Port of Oakland, Manager Environmental Science
Continental Corporation, Director Environmental Science

EDUCATION and CERTIFICATION:

University of California - Berkeley/Santa Barbara: PhD (candidate)
University of California - Berkeley: Master's Degree
Sydney University of Technology; Bachelor's Degree
Licensed California Broker –Special lines, Surplus Lines, Property & Casualty

PRESENTATIONS:

Mr. O'Brien has made a number of presentations concerning transferring contaminated properties including:

- Department of Energy International Conference
- Environmental Super Conference
- Pacific Coast Association of Port Authorities
- National Association of Installation Developers
- Office of the Secretary of Defense Community Conference
- American Association of Port Authorities
- Defense/State Memorandum of Agreement Conference
- Association of Defense Communities

NEWSPAPER, JOURNAL ARTICLES:

A number of journals and newspaper articles have featured Mr. O'Brien's work. They include:

- Stockton Record, August 17, 2010
- Contra Costa Times, April, 2010
- San Francisco Chronicle September 13, 2003
- Stockton Record, August 2003
- National Association of Installation Developers (NAID), 2000
- EPA Superfund Report, Vol. XIII, No. 15, July 21, 1999
- The Oakland Tribune, February 20, 1999
- San Francisco Sunday Examiner and Chronicle, July 11, 1999
- The Oakland Tribune, July 9, 1999.

Mr. O'Brien has also written a number of papers and contributed to a number of published articles in the area of contaminated properties and risks associated with environmental contamination.

RELEVANT BASE CLOSURE EXPERIENCE

Mr. O'Brien has advised (cities, counties, developers, DOD, port authorities, LRAs, attorneys) on many base closures throughout the country and world. Some of these bases include:

- Oakland Army Base
- Hunters Point Naval Base
- Bonneville Army Base
- Fleet Industrial Supply Center Oakland
- Point Molate Naval Base
- Naval Ordnance Station-Louisville
- Mare Island Naval Base
- El Torro Marine Base
- Badger Army Ammunition Base
- Fort McClellan Army Base
- Rough & Ready Naval Base
- Stockton INS Base

Steven I. Michelson, R.G.

Principal Geologist

Mr. Michelson applies technical, economic, and regulatory analysis to assist clients in the cost effective management and closure of environmental liabilities. Mr. Michelson characterizes hydrogeologic conditions; contaminant sources, extent, transport, and fate; and evaluates remediation alternatives. He has particular expertise in the assessment of coastal aquifers, the migration of ground water to the ocean, and interactions between ground water and surface water. He routinely designs and implements investigations that are NCP consistent, enables assessments of human and ecological risk, and supports evaluations of remedial alternatives. He offers solutions to liabilities that comprehensively address regulatory, public, stakeholder, technical, and financial concerns.

SELECTED PROJECT EXPERIENCE:

- **Rough & Ready Island, California:**
Lead the technical evaluations supporting the transfer and supporting insurance policy of this former Navy installation. Designed and implement investigations of contaminated sites. Assessed data and authored remedial investigation and closure reports. Assisted with the risk analysis and transfer of 1,500 acres of former military property.
- **INS Parcel, California:**
Lead the technical evaluations supporting the transfer of this Immigration and Naturalization Service parcel. Designed and implement investigations of contaminated sites. Assessed data and authored remedial investigation and pending closure reports.
- **Alameda Naval Air Station, San Francisco Bay, California:**
Assessed the migration and discharge of ground water from a landfill to ponds, wetlands, and sediments and water in the San Francisco Bay. Conclusions are used in assessing ecological risks and screening remedial actions.
- **Department of Defense and Department of Energy, Arizona, California, New England:**
Prepared and implemented Remedial Investigations and Feasibility Studies at several installations, including Riverbank Army Ammunition Plant; Sharp Army Depot; and Mather, Castle, Edwards, Hamilton, Norton, Travis, Luke, Pease, Westover, and Otis Air Force Bases.
- **Port of Stockton, Stockton, California:**
Principal Scientist directing the investigation of environmental issues related to dredging activities, upland placement of dredge sediments, reuse of dredge sediments, and related potential impacts to surface and ground waters.

- Mid-Peninsula Regional Open Space District, South San Francisco Bay:
Lead technical expert in negotiations with other PRPs and federal and state of California resource trustees. NRDA claim was for alleged environmental injuries to the Guadalupe River and South San Francisco Bay, including surface water, sediments, ground water, fish, and birds from historical mercury mining. Used resource equivalency analysis (REA) models to scale alleged resource injuries to resource service flows.
- Napa Sanitation District
Completed the initial feasibility studies of an aquifer storage and recovery project using reclaimed water. Successfully received Grant funding from the Department of Water Resources and State Water Resources Control Board.
- Unocal Avila Beach, Central Coast, California:
Investigated transport and fate of ground water and petroleum discharged into the intertidal, surf, ocean, beach sediments, estuary, and creek. The findings were used to estimate human and ecological risk, and injury to surface water and biological resources. Participated in natural resources damage assessment (NRDA) negotiations with Regional Board and California Fish and Game.
- Unocal Guadalupe Oil Field, Central Coast, California:
Investigated pathways for contaminated ground water to impact surface waters, pond sediments, and vegetation. Technical Co-Chair of a trustee/PRP group assessing hydrogeologic setting and ground water contamination associated with NRDA claim. Valued ground water injury, impacts to water resources, and scaled a variety of alternative ground water restoration/mitigation projects.
- Petroleum Sites, several states:
Provided technical and strategic support in the investigation, remediation, restoration, monitoring, emergency response, and closure of sites overseen by regulators operating pursuant to the Clean Water Act and resource trustees operating pursuant to NRDA. Work has been performed throughout the US at gasoline stations, bulk terminals, pipelines, refineries, and production fields. Clients include oil companies, airlines, airports, Ports, and DoD.

PROFESSIONAL WORK HISTORY

Environmental Risk Services, Corp.
Applied Water Resources
Entrix
Roy F. Weston, Inc.

EDUCATION and TRAINING:

Lehigh University: B.S. Geology and B.S. Civil Engineering
UC Berkeley: Haas School of Business, MBA Evening Program, graduate study

University of San Francisco: Hazardous Material Management, MS Program, graduate study
EPA Monitored Natural Attenuation
ASTM Risk Based Corrective Action
Princeton Ground Water Course (NGWA)
Mediating Environmental Agreements (Concur);
UC Berkeley Extension in Statistics, Accounting, Microeconomics, and Macroeconomics.

CERTIFICATION

Registered Geologist; California - 5165
Professional Geologist in Oregon and Delaware
40-hour OSHA Training

ORGANIZATIONS

National Ground Water Association
Groundwater Resources Association
International Association of Hydrogeologists
American Society of Civil Engineers
California Mining Association
Environmental Committee Technical Lead on Abandoned Mines (1997-2000)

PUBLICATIONS and INVITED PRESENTATIONS

Mr. Michelson has prepared numerous technical reports, confidential memorandums, discussion papers, and strategy documents for clients, senior management, and attorneys on a wide range of topics and issues. Topics include site characterization, agency relations, beneficial uses of water, natural resource damage assessments and characterization of injury and damage to water, resource equivalency analysis to scale mitigation, analysis of mitigation alternatives, QA/QC issues, and contaminated ground water as a vector to human health and ecological exposure.

Michelson, S. I., *Funding Water Resource Projects with Compensatory Restoration, Mitigation, and Resource Equivalency Analysis*; AWRA, November 2003 and AIH, October 2003.

Michelson, S. I., *Mechanics and Strategies of Water Equivalency Analysis*. Southwest Hydrology Journal, November-December 2002 issue focused on Water NRDA's.

Michelson, S. I., and del Nevo, A., *Resource Equivalency Analysis to Scale Compensatory Mitigation*. Invited presenter at the Annual Conference of the California Mining Association, May 1998.