

Appendix 8-1
Statements of Qualifications for Consultant

LUHDORFF & SCALMANINI

Founded in 1980, Lohdorff & Scalmanini, Consulting Engineers (LSCE) is based in Woodland, CA and specializes in the areas of groundwater resource evaluation, management and protection; water well and pumping equipment design; and soil and groundwater contamination investigation and remediation. LSCE's staff includes specialists in groundwater resources engineering, hydrogeology, water well design, municipal and private pump station design, treatment and distribution system design, environmental evaluation and remediation. Vicki Kretsinger will serve as the LSCE project leader. She is a Firm Officer and Principal Hydrologist with over 20 years of experience in groundwater hydrology and water quality, including experience in investigation, design, and implementation of surface and groundwater monitoring plans.

Lohdorff and Scalmanini, Consulting Engineers (LSCE) is a consulting and services organization that deals exclusively with the investigation, development, use, protection and management of groundwater resources. LSCE was founded by its two original principals in 1980 to fill a recognized need for technical and management expertise in a broad range of projects and problems associated with groundwater resources development. During its years of growth, LSCE has assembled a staff of professionals who specialize in groundwater resource development and management; those professionals include engineers, geologists, hydrologists and hydrogeologists. As a result of a vast experience in groundwater, combined with LSCE's extensive knowledge of the design and installation of wells and pumping equipment, the staff are uniquely qualified for projects concerning the effective and efficient development of groundwater, its protection, and its development and use for municipal, agricultural and industrial purposes. The firm's primary focus has been to address the extent and availability of groundwater resources and the development of groundwater supply in response to the requests of numerous public agencies and private entities. In recent years, the traditional assessments and development of groundwater have increased in scope as a result of an increasing demand for the investigation of groundwater quality and contamination problems and the determination of potential solutions to them. At the same time, there has been an increasing challenge to modify or otherwise design groundwater supply systems (i.e., wells and well fields) to control groundwater quality and/or the movement of contaminants and to avoid the inflow of contaminants to the water supply system. LSCE's clients include a large range of municipalities, water districts, other public agencies, and corporate and private interests throughout California and other western states.

LSCE has designed and managed the construction or rehabilitation of hundreds of municipal water supply and monitoring wells for more than 25 years. The firm's staff consists of engineers and geologists with a high degree of experience in well design, drilling operations, well completions, and all facets of the water well services industry. LSCE's design approach focuses on achieving structurally sound, sand-free and efficient well structures. The principal design team members average over 20 years of experience with well technology, enabling LSCE to respond to every type of well project that arises in the industry, including serving as expert witnesses in disputes and providing technical oversight during well construction. Representative

clients include cities such as San Francisco, Pleasanton, Hayward, Davis, and Morgan Hill; water districts throughout the state of California; and private water companies like California Water Services. LSCE has a highly recognized reputation for the development of practical approaches to well construction or modification to control contaminated groundwater or groundwater supplies otherwise affected by natural constituents such as iron, manganese, arsenic, etc. that would be of potential concern to the water purveyor. LSCE has extensive knowledge of Federal, State and local regulatory requirements. Numerous projects, particularly environmental contamination projects, have required compliance with regulations set forth by Federal, State and local agencies.

LSCE has conducted groundwater resource evaluations and designed and implemented management programs that have included the delineation of wellhead protection areas; performance of Drinking Water Source Assessment and Protection Programs; identification of recharge areas; control of contaminated groundwater; identification and control of saline water intrusion; development of well construction, well modification and well destruction programs; development of programs to mitigate conditions of overdraft; monitoring of groundwater levels, quality and storage, monitoring and management of land subsidence; development of surface and groundwater conjunctive use programs, including the design of artificial recharge facilities via surface infiltration and injection wells; investigation and development of the recharge potential of reclaimed water; and plans for the long-term protection of groundwater quality.

LSCE has extensive experience with all aspects of groundwater monitoring, including design and construction of monitoring networks, development and implementation of monitoring programs, and collection and analysis of monitoring data. Monitoring programs have been designed for a variety of purposes, including compliance with Waste Discharge Requirements (WDRs) and other regulatory requirements and evaluation of the impacts of wells and dewatering activities required for environmental documents. LSCE has designed groundwater monitoring networks and databases throughout California for the quantitative and qualitative interpretation of hydrologic data and analysis of basin-wide groundwater conditions. Monitoring programs frequently include surface water monitoring to evaluate stream-aquifer interactions.

LSCE's hydrologic modeling capabilities include the development, calibration, application and analysis of groundwater flow and transport models (analytical, numerical, and empirical), development and application of models for the analysis and management of water resource systems in the context of environmental and legal constraints, design of groundwater monitoring networks, quantitative and qualitative interpretation of hydrologic data, and analysis of well and aquifer tests. LSCE also has extensive experience reviewing existing models, recommending improvements to these models and updating existing models with new field data.