

KEVIN G LAKEY, LHG, PE

Project Manager

Education

MS, Geological Engineering (Hydrogeology Option), Washington State University, 1985
BS, Geology, Central Washington University, 1982

Professional Licenses

Professional Engineer, WA
Professional Geologist, WA, ID

Professional Experience

Mr. Kevin Lakey, LHG, PE, joined SCS in 2010 and has been working in the solid waste engineering and environmental consulting field since 1985. Mr. Lakey provides technical expertise for a wide variety of solid waste projects and hydrogeologic studies in the Northwest. His project experience includes the design of bottom liners and cover systems for municipal solid waste landfills, facility permitting, hydrogeologic characterization of solid waste sites, RCRA hazardous waste sites, proposed waste, disposal facilities, agriculture sites, regional aquifer systems, and leaking underground storage tanks, feasibility studies, and site studies for property transfers.

As a senior engineering professional, Mr. Lakey's responsibilities include engineering design, preparing plans, specifications, and quality assurance documents, coordinating project work, serving as engineer of record, negotiating with agencies, analyzing, and interpreting hydrogeologic and geochemical data, evaluating remedial alternatives for site cleanups, preparing technical reports, and preparing permit documents. In addition, Mr. Lakey has provided expert testimony for several projects related to permitting issues, insurance cost recovery, and litigation. From 1985 through 2009, his previous employment included Dames & Moore, EMCON, and Kleinfelder.

Project Experience

Pierce County Recycling, Composting and Disposal LLC dba LRI, Cell 4B Construction Quality Assurance (CQA), LRI Landfill, Graham, WA. Project Manager responsible for technical direction and engineering review for the performance of construction quality assurance (CQA) services at the active LRI Landfill in Graham, WA. Tasks included CQA during the construction of the 5.5 acre Cell 4B Phase III bottom liner. CQA responsibilities involved contractor communications, construction observation and testing, field engineering, and preparation of a documentation report.

Pierce County Recycling, Composting and Disposal LLC dba LRI, Cell 4B Engineering, LRI Landfill, Graham, WA. Project Manager responsible for technical direction, engineering design, project estimates, plans and specifications, budget management, scheduling, staffing,

subcontractor management, and reporting for the design engineering services at the active LRI Landfill in Graham, WA. Tasks included engineering services related to the design of the 5.5 acre Cell 4B Phase III bottom liner. Engineering responsibilities involved preparing drawings, a project manual, and bid documents. Design features included a leak detection system and a composite liner of clay and HDPE geomembrane. The leachate collection system was tied into the existing sump and pump station. Finally, data was provided to the local health district regarding the suitability of on-site screened till to serve as a low-permeability soil liner.

Pierce County Recycling, Composting and Disposal LLC dba LRI, Dedicated Pump Installation, Hidden Valley Landfill, Puyallup, WA. Project Manager responsible for technical direction, engineering design, project estimates, plans and specifications, budget management, scheduling, staffing, subcontractor management, and reporting for the installation of a dedicated pump at the closed Hidden Valley Landfill in Puyallup, WA. Tasks included the installation of dedicated QED well wizard pumps into six groundwater monitoring wells, documenting pump depths, and reporting to the local health district.

Pierce County Recycling, Composting and Disposal LLC dba LRI, East Lined Area Monitoring, Hidden Valley Landfill, Puyallup, WA. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the performance of leachate monitoring at the closed Hidden Valley Landfill in Puyallup, WA. Tasks included leak detection and leachate volume monitoring of the east lined area at the facility per the Response Action Plan. Collected data was summarized and included in quarterly and annual reports submitted to Ecology and the local health district.

Pierce County Recycling, Composting and Disposal LLC dba LRI, Environmental Management System (EMS) Development, LRI Landfill, Graham, WA. Project Manager responsible for technical direction, system analysis, regulatory evaluation, and reporting for the development of an environmental management system at the active LRI Landfill in Graham, WA. The project serves to establish an ISO 14001 conformant program that outlines the procedures necessary for the development of an EMS and reflects global consensus on good environmental practice. Tasks included an internal audit, ISO 14001 EMS audit, EMS audit meeting, corrective/preventative action report, and registrar coordination.

Pierce County Recycling, Composting and Disposal LLC dba LRI, Greenhouse Gas (GHG) Evaluation and Reporting, Hidden Valley Landfill, Puyallup, WA. Project Manager responsible for technical direction, system analysis, regulatory evaluation, and reporting for the evaluation and subsequent reporting of greenhouse gas emissions at the closed Hidden Valley Landfill in Puyallup, WA. The project served to conform with the USEPA final rule for mandatory reporting of GHG from large GHG sources (Title 40 of the Code of Federal Regulations, Part 98: Mandatory Green House Gas Reporting, Subpart HH). Tasks included GHG generation modeling to determine if the threshold for mandatory GHG reporting of 25,000 MTCO₂e, or more, per year was exceeded. A letter report summarizing the data used, model outputs and findings regarding the applicability of the GHG rule was prepared along with a summary of GHG monitoring requirements, an evaluation of the existing monitoring system, cost estimates for any required instrumentation, and a GHG Monitoring Plan.

Pierce County Recycling, Composting and Disposal LLC dba LRI, Greenhouse Gas (GHG) Monitoring, LRI Landfill, Graham, WA. Project Manager responsible for technical direction,

system analysis, regulatory evaluation, and reporting for the evaluation and subsequent reporting of greenhouse gas emissions at the active LRI Landfill in Graham, WA. The project served to conform with the USEPA final rule for mandatory reporting of GHG from large GHG sources (Title 40 of the Code of Federal Regulations, Part 98: Mandatory Green House Gas Reporting, Subpart HH). Tasks included GHG generation modeling to determine if the threshold for mandatory GHG reporting of 25,000 MTCO₂e, or more, per year was exceeded. A letter report summarizing the data used, model outputs and findings regarding the applicability of the GHG rule was prepared along with a summary of GHG monitoring requirements, an evaluation of the existing monitoring system, cost estimates for any required instrumentation, and a GHG Monitoring Plan.

Pierce County Recycling, Composting and Disposal LLC dba LRI, Groundwater Reporting (2010), Purdy Landfill, Purdy, WA. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the performance of quarterly groundwater reporting at the closed Purdy Landfill in Purdy, WA. Tasks included data validation, data analysis services, and the development of report documents for the local health district.

Pierce County Recycling, Composting and Disposal LLC dba LRI, Groundwater Monitoring (2010), Purdy Landfill, Purdy, WA. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the performance of quarterly groundwater monitoring at the closed Purdy Landfill in Purdy, WA. Tasks included sample collection at five wells, data validation, and data management.

Pierce County Recycling, Composting and Disposal LLC dba LRI, Groundwater Monitoring (2010), Hidden Valley Landfill, Puyallup, WA. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the performance of quarterly groundwater monitoring at the closed Hidden Valley Landfill in Puyallup, WA. Tasks included sample collection at 24 wells, data validation, data management, and data evaluation and reporting per the Groundwater Compliance Monitoring Plan. Annual monitoring of the leachate and two leak detection sumps was also performed. Reports were issued to Ecology and the local health district.

Pierce County Recycling, Composting and Disposal LLC dba LRI, Groundwater Monitoring (2010), LRI Landfill, Graham, WA. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the performance of quarterly groundwater monitoring at the LRI Landfill in Graham, WA. Tasks included sample collection at nine wells, data validation, data management, and data evaluation and reporting per the solid waste handling permit, WAC 173-351, and Section 12 of the Plan of Operation. Monitoring of six leak detection sumps and six leachate collection points were also sampled and tested on a quarterly basis. Reports were issued to Ecology and the local health district. In 2010, an upgrade to the Programmable Logic Controller (PLC) data storage and downloading system was designed and installed.

Pierce County Recycling, Composting and Disposal LLC dba LRI, Landfill Gas (LFG) Monitoring (2010), Purdy Landfill, Purdy, WA. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the performance of quarterly landfill gas reporting at the Purdy Landfill in Purdy,

WA. Tasks included monitoring probes around the facility's perimeter and preparing data reports.

Pierce County Recycling, Composting and Disposal LLC dba LRI, Landfill Gas (LFG) Monitoring (2010), Hidden Valley Landfill, Puyallup, WA. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the performance of routine landfill gas monitoring at the Hidden Valley Landfill in Puyallup, WA. Tasks included the monthly monitoring of 32 gas probes, quarterly monitoring of on-site buildings, and quarterly inspections of the gas condensate recirculation system and the cover system. Monitoring results were reported to Ecology and the local health district.

Pierce County Recycling, Composting and Disposal LLC dba LRI, Landfill Gas (LFG) Flow Verification and Data Recorder Troubleshooting, LRI Landfill, Graham, WA. Project Manager responsible for technical direction and engineering review for the verification of the landfill gas flow meter and data recorder troubleshooting at the LRI Landfill in Graham, WA.

Pierce County Recycling, Composting and Disposal LLC dba LRI, Landfill Gas (LFG) Monitoring (2010), LRI Landfill, Graham, WA. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the performance of routine landfill gas monitoring at the LRI Landfill in Graham, WA. Tasks included the monthly monitoring of seven gas probes and quarterly monitoring of on-site buildings. Monitoring results were reported to Ecology and the local health district.

Pierce County Recycling, Composting and Disposal LLC dba LRI, Landfill Closure Engineering, LRI Landfill, Graham, WA. Project Manager responsible for technical direction, engineering design, project estimates, plans and specifications, budget management, scheduling, staffing, subcontractor management, and reporting for the execution of closure engineering services at the LRI Landfill in Graham, WA. Tasks included evaluation of ongoing settlement of final grades and various closure options prior to 2011.

Pierce County Recycling, Composting and Disposal LLC dba LRI, Leachate Pretreatment, Hidden Valley Landfill, Puyallup, WA. Project Manager responsible for technical direction, engineering design, project estimates, plans and specifications, budget management, scheduling, staffing, subcontractor management, and reporting for the value engineering of a leachate pretreatment at the Hidden Valley Landfill in Puyallup, WA.

Pierce County Recycling, Composting and Disposal LLC dba LRI, Post-Closure Landfill Engineering and Maintenance, Hidden Valley Landfill, Puyallup, WA. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the delivery of post-closure landfill engineering and maintenance at the Hidden Valley Landfill in Puyallup, WA. The project served to provide inspection and engineering services associated with the maintenance and repair of closed portions of the landfill. Tasks included monitoring a sinkhole on the south landfill slope, and ongoing efforts to extinguish a fire.

Pierce County Recycling, Composting and Disposal LLC dba LRI, Surface Water Services, LRI Landfill, Graham, WA. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the delivery of

surface water services at the LRI Landfill in Graham, WA. Tasks included the review and reporting of monthly and quarterly surface water monitoring data collected by LRI personnel. Data reports were submitted quarterly to the Ecology and the local health district. The Storm Water Pollution Prevention (SWPP) Plan was also updated per the requirements of the Industrial NPDES permit.

Pierce County Recycling, Composting and Disposal LLC dba LRI, Technical Support, LRI Landfill, Graham, WA. Project Manager responsible for technical direction, engineering design, project estimates, plans and specifications, budget management, scheduling, staffing, subcontractor management, and reporting for the delivery of technical support services at the LRI Landfill in Graham, WA. Tasks included legal support, permitting, site tours, regulatory meetings, and technical evaluations, as required.

Pioneer Towing, Groundwater Monitoring, Kenmore Industrial Park, Kenmore, WA. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the performance of groundwater monitoring services at the Kenmore Industrial Park in Kenmore, WA. The project served to test for dissolved metals, total petroleum hydrocarbons (TPH), and semi-volatile organic compounds (SVOCs). Tasks also included agency negotiations.