DANIEL VENCHIARUTTI, LG, LHG

Education

MS, Geology, University of Iowa, 1987
BS, Biology/Geology, University of New York at Stony Brook, 1983

Professional Licenses

Licensed Professional Geologist (LG)—(Oregon, Idaho, Alaska, 1992) (Washington, 2002), Licensed Professional Hydrogeologist (LHG)—(Washington)

Specialty Certifications

- American Institute of Professional Geologists (AIPG) Certification, 1995
- Department of Ecology UST Site Assessment and Decommissioner's Supervisor Licenses, 1992

Professional Affiliations

- National Water Well Association
- Association of Groundwater Scientists and Engineers
- Geological Society of America
- Society of Economic Geologists
- American Association of Professional Geologists

Professional Experience

Dan Venchiarutti, LG, LHG, joined SCS in 1990 and has nearly three decades of design and management experience performing environmental investigations, monitoring, facility compliance, brownfields redevelopment, and site remediation inclusive of 367 individual SCS assignments. His work focuses on hazardous and solid waste sites including brownfields and landfills where he has been involved with waste characterization, post-closure management, and redevelopment activities. He is also experienced with real estate due diligence, storm water management, compliance, underground storage tanks, hazardous waste minimization and spill planning, and evaluating human health and environmental impacts. He is highly proficient in groundwater modeling and tracking contaminant plumes through a variety of media. Dan is a member of the several geologic and groundwater-related associations and societies. Dan leads the environmental services practice in the Northwest.

Groundwater

Groundwater (GW) Monitoring, Port Coquitlam, BC, Canada. Client - Kennametal. Project Geologist responsible for sampling activities, data management and interpretation, and majority of report preparation for the performance of periodic sample collection and analyses of groundwater at a metals plant in Port Coquitlam, BC. The project follows an extensive soil and

groundwater investigation performed previously. Elevated metals concentrations, due to infiltration from wastewater lagoon, had been detected in shallow groundwater.

Groundwater (GW) Sampling, Hartman/Sheldon Property, Redmond, WA. Client - Genie Industries. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the execution of a groundwater sampling event at the Hartman/Sheldon property in Redmond, WA. Wells were developed using a geoprobe system and water samples were captured for laboratory analysis. A written report summarized findings.

Groundwater and Landfill Gas (LFG) Environmental Monitoring Report 2007 Q4, Coupeville Solid Waste Facility (CSWF), Coupeville, WA. Client - Island County Solid Waste Dept. Project Director responsible for project quality assurance (QA) and final document review for the development of the 2007 quarter four data review report for groundwater and landfill gas environmental monitoring at the Coupeville Solid Waste Facility in Coupeville, WA.

Groundwater and Landfill Gas (LFG) Environmental Monitoring Report 2007 Q3, Coupeville Solid Waste Facility (CSWF), Coupeville, WA. Client - Island County Solid Waste Dept. Project Director responsible for environmental review for the development of the 2007 quarter three data review report for groundwater and landfill gas environmental monitoring at the Coupeville Solid Waste Facility in Coupeville, WA.

Groundwater and Landfill Gas (LFG) Environmental Monitoring Report 2007 Q2, Coupeville Solid Waste Facility (CSWF), Coupeville, WA. Client - Island County Solid Waste Dept. Project Director responsible for technical guidance, project quality assurance (QA) and final document review for the development of the 2007 quarter two data review report for groundwater and landfill gas environmental monitoring at the Coupeville Solid Waste Facility in Coupeville, WA.

Groundwater and Landfill Gas (LFG) Environmental Monitoring Report 2007 Q1, Coupeville Solid Waste Facility (CSWF), Coupeville, WA. Client - Island County Solid Waste Dept. Project Director responsible for technical guidance, project quality assurance (QA) and final document review for the development of the 2007 quarter one data review report for groundwater and landfill gas environmental monitoring at the Coupeville Solid Waste Facility in Coupeville, WA.

Groundwater and Landfill Gas (LFG) Environmental Monitoring Report 2006 Q4, Coupeville Solid Waste Facility (CSWF), Coupeville, WA. Client - Island County Solid Waste Dept. Team Member responsible for environmental review for the development of the 2006 quarter four annual data review report for groundwater and landfill gas environmental monitoring at the Coupeville Solid Waste Facility in Coupeville, WA.

Groundwater and Soil Contamination Remedial Action, Sooper Cleaners, Normandy Park Shopping Center, Normandy Park, WA. Client - Griffin & Jensen. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the execution of remedial activities to address soil and groundwater contamination at a former dry cleaner site at the Normandy Park Shopping Center in Normandy Park, WA. Responsibilities included decommissioning an old dry well and several septic tanks and replacement of sanitary sewer and storm water utilities in the area with

residual perchloroethylene (PCE) soil contamination. Confirmation soil samples were used to remove residual hot spots, with remaining soil contamination managed by institutional controls.

Groundwater and Soil Sampling, Fairwood Shopping Center and Dry Cleaner, Renton, WA. Client - GMS Realty LLC. Project Geologist responsible for environmental review for the performance of a groundwater investigation at the Fairwood Shopping Center in Renton, WA. The project included obtaining and reviewing available well logs for the area to evaluate depth-to-groundwater and groundwater flow direction, installation and development of one groundwater monitoring well to allow for groundwater sampling, collection of groundwater samples using low flow sampling techniques, and the evaluation of potential for groundwater impact resulting from known soil contamination under the dry cleaner tenant space.

Groundwater Assessment of Offsite Wells, PACE Property, Kirkland, WA. Client - CamWest Development Inc. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the performance of a groundwater assessment on a residential property located down gradient of the PACE (former Ultra Corp) site in Kirkland, WA. The assessment served to determine the potential for VOC groundwater contamination to have migrated onto the subject property. Three shallow groundwater wells were installed, developed, and sampled to characterize the water quality conditions and better define the local groundwater flow direction. The client intended to acquire and redevelop the site. Findings and recommendations were presented in a letter report.

Groundwater Assessment, Chlor-Alkali Plant, Squamish, BC, Canada. Client - CXY Chemicals Group. Project Geologist responsible for sampling activities, data management and interpretation, and majority of report preparation for the execution of a groundwater assessment at the Chlor-Alkali Plant in Squamish, BC, Canada. Tasks included evaluating the nature and extent of contamination and providing an assessment the of site hydrogeology. A three dimensional modflow model for the site was prepared.

Groundwater Assessment, Sodium Chlorate Plant, Squamish, BC, Canada. Client - CXY Chemicals Group. Project Geologist responsible for sampling activities, data management and interpretation, and majority of report preparation for the execution of a groundwater assessment at the Sodium Chlorate Plant in Squamish, BC, Canada. Tasks included groundwater sampling and analysis and an evaluation of the nature and extent of groundwater contamination.

Groundwater Assessment, Yakama Nation Landfill, Toppenish, WA. Client - Yakama Nation. Project Geologist responsible for sampling activities, data management and interpretation, and majority of report preparation for the performance of an exploratory drilling program at the Yakama Nation Landfill in Toppenish, WA. The project served to characterize geology and groundwater conditions and involved the installation, development and sampling of groundwater monitoring wells to obtain baseline water quality. A long-term groundwater monitoring program was designed and implemented for the site.

Groundwater Contamination Evaluation, Valley Centre Corporate Park, Auburn, WA. Client - Principal Real Estate Investors. Project Geologist responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the continued evaluation of groundwater contamination issues related to arsenic at Valley Centre

industrial warehouse property in Auburn, WA. Tasks involved the installation and development of two additional monitoring wells, and sampling all wells (existing and new) for three quarters in order to evaluate trends and variations in the data. A background data search was also performed to evaluate whether site conditions reflected background conditions.

Groundwater Evaluation for Arsenic, Granite Falls Aggregate Mining Operation (GFAMO) Site, Granite Falls, WA. Client - Rinker Materials (WA). Project Geologist responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the performance of a groundwater evaluation at the Granite Falls Aggregate Mining Operation in Granite Falls, WA. The project serve to evaluate preliminary analytical data from bedrock, sand and gravel reserves, and groundwater to determine the potential for the release of naturally occurring arsenic into groundwater as a result of the proposed mining operations. Tasks included the design of a testing program for implementation during mining operations to provide a database on arsenic content in mined material. Finally, the evaluation of the potential for arsenic release and the testing program was added to an environmental impact statement prepared for the mining operation.

Groundwater Investigation, Charles Street Site, Seattle, WA. Client - Seattle, City of. Project Geologist responsible for sampling activities, data management and interpretation, and majority of report preparation for the installation of six groundwater monitoring wells to characterize the nature and extent of a petroleum hydrocarbon contamination plume. The project also involved the identification of contamination levels in subsurface soils and groundwater, and aquifer testing to determine the direction and rate of groundwater and contaminant movement.

Groundwater Investigation, Eastmont Transfer Station, Seattle, WA. Client - Waste Management of Washington. Team Member responsible for sampling activities, data management and interpretation, and majority of report preparation for the performance of a soil and groundwater investigation at the Eastmont Transfer Station in Seattle, WA. The project served to evaluate the presence of suspected heavy metals and petroleum hydrocarbon contamination identified during a previous Phase I ESA. The source of potential contamination was suspected to be fill material deposited on the site prior to development. Four groundwater monitoring wells were installed to facilitate the investigation.

Groundwater Investigation, Lincoln Executive Center, Bellevue, WA. Client - Principal Financial Group. Project Geologist responsible for sampling activities, data management and interpretation, and majority of report preparation for the performance of a groundwater investigation at the Lincoln Executive Center commercial development, in Bellevue, WA. The groundwater investigation was performed in the property's southeast corner where a former service station had been located. Four groundwater monitoring wells were installed, developed and sampled.

Groundwater Investigation, Overlake Village Shopping Center, 2400 148th Ave NE, Redmond, WA. Client - SATO Corporation. Project Geologist responsible for sampling activities, data management and interpretation, and majority of report preparation for the performance of a subsurface investigation at the Overlake Village shopping center in Redmond, WA. The project served to assess the nature and extent of groundwater contamination at a former dry cleaner site. Work included the installation of eight groundwater monitoring wells to confirm

the presence of groundwater contamination and to determine the direction of groundwater flow. An additional direct push investigation was required to characterize the site.

Groundwater Investigation, Port Coquitlam, BC, Canada. Client - Kennametal. Project Geologist responsible for sampling activities, data management and interpretation, and majority of report preparation for the investigation of apparent groundwater contamination resulting from plant process wastewater surface impoundments in Port Coquitlam, BC. The project involved the installation of groundwater monitoring wells, performance of groundwater sampling and analysis to define the nature and extent of the contaminant plume, and recommending the appropriate remedial action based on investigation results.

Groundwater Investigation, Sooper Cleaners, Normandy Park Shopping Center, Normandy Park, WA. Client - Griffin & Jensen. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the performance of a groundwater investigation at the Normandy Park Shopping Center Sooper Cleaners site in Normandy Park, WA. The project involved the installation of two nests of groundwater wells, developing and sampling groundwater from both new and existing wells, and performing aquifer testing and survey for domestic water wells. The focus of the site evaluation and mitigation efforts was on groundwater contamination by ITCE, PCE, and PCA.

Groundwater Monitoring (2004-2007), Sooper Cleaners, Normandy Park Shopping Center, Normandy Park, WA. Client - Griffin & Jensen. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the performance of four years of quarterly groundwater monitoring at onsite and offsite well locations at the Sooper Cleaners site in Normandy Park, WA. Tasks consisted of sampling 11 on-site and three off-site wells for PCE, recording water level elevations, and determining groundwater flow direction and gradient. Quarterly letter reports presenting monitoring results and annual summary reports were prepared.

Groundwater Monitoring Evaluation, Horn Rapids Landfill, Richland, WA. Client - Richland, City of. Project Manager responsible for sampling activities, data management and interpretation, and majority of report preparation for the compilation of historic groundwater monitoring data for the Horn Rapids Landfill in Richland, WA. The project consisted of a statistical evaluation to detect increases over background quality.

Groundwater Monitoring Report, Chevron Fueling Station, Seattle Heights Shopping Center, Lynnwood, WA. Client - Joshua Green Corporation. Project Geologist responsible for environmental review for the development of a May 2003 groundwater monitoring report for a Chevron Fueling Station at the Seattle Heights Shopping Center in Lynnwood, WA.

Groundwater Monitoring Well Installation, Marivista Park Site, Adjacent to Normandy Park Shopping Center, Normandy Park, WA. Client - Griffin & Jensen. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the installation of two off-site groundwater monitoring wells on the Marivista Park Site, adjacent to the Normandy Park Shopping Center in Normandy Park, WA. The task served to assess down gradient contamination and included siting, drilling, installing and developing two 200 feet plus deep groundwater monitoring wells in Marivista Park

(approximately 1,000 ft down gradient from the Normandy Park Shopping Center). Additional work involved the performance of soil and hydropunch groundwater sampling to determine final well configuration and the preparation of boring/well logs with a supplemental groundwater report.

Groundwater Monitoring, Charles Street Fueling Station, Charles Street, Seattle, WA. Client - Seattle, City of. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the execution of groundwater monitoring at the Charles Street fueling station in Seattle, WA. The project included resurveying four existing groundwater monitoring wells and preparing quarterly letter reports.

Groundwater Monitoring, Ellensburg, WA. Client - Waste Management, Inc. Project Geologist responsible for sampling activities, data management and interpretation, and majority of report preparation for the performance of quarterly groundwater monitoring at a WMI site in Ellensburg, WA. The project included purging three wells followed by sample collection, hydrocarbon analysis, and the preparation of a summary report.

Groundwater Monitoring, Former Rainier Disposal Site, Renton, WA. Client - Waste Management, Inc. Team Member responsible for sampling activities, data management and interpretation, and majority of report preparation for the collection of groundwater samples and continued long term groundwater monitoring at the former Rainier Disposal site in Renton, WA. Historic sampling activities revealed a decreasing trend in contaminant concentrations in the groundwater.

Groundwater Monitoring, Former Rainier Disposal Site, Renton, WA. Client - Waste Management of North America. Project Geologist responsible for sampling activities, data management and interpretation, and majority of report preparation for the continued quarterly groundwater monitoring at a former gasoline underground storage tank site in Renton, WA. Sampling and testing for BTEX and total petroleum hydrocarbon (TPH) contamination were performed in conjunction with monitoring for the nature and extent of the benzene plume.

Groundwater Monitoring, Friday Harbor and Orcas Landfills, Friday Harbor, WA. Client - San Juan County Public Works Dept. Project Geologist responsible for sampling activities, data management and interpretation, and majority of report preparation for the delivery of quarterly groundwater monitoring activities at the Friday Harbor and Orcas Landfills near Friday Harbor, WA. The project involved the performance of analytical testing for general water quality standards, primary drinking water metals, and volatile organics. Additionally, an annual groundwater monitoring report inclusive of a summary of quarterly data, statistical evaluation, and determination of groundwater flow rate and direction was prepared.

Groundwater Monitoring, Maltby Facility, Maltby, WA. Client - Rinker Materials (WA). Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the execution of a groundwater monitoring program at a reclamation landfill in Maltby, WA. The project, required by the Snohomish Health District, involved the preparation of a groundwater monitoring plan for

review and approval by the Health District and subsequent monitoring well installation and sampling.

Groundwater Monitoring, Sooper Cleaners, Normandy Park Shopping Center, Normandy Park, WA. Client - Griffin & Jensen. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the performance of one year of quarterly groundwater monitoring at on-site and off-site well locations at Sooper Cleaners site in Normandy Park, WA. Each quarterly event involved sampling 11 on-site and three off-site wells for PCE, recording water level elevations, and determining groundwater flow direction and gradient. Quarterly letter reports presenting monitoring results and an annual summary report were prepared.

Groundwater Plan Addendum, Capitol Disposal Landfill, Juneau, AK. Client - Waste Management Inc. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the evaluation of groundwater plan for the Capitol Disposal Landfill in Juneau, AK. The project involved evaluating analytical and statistical data reporting methods for a transition from background to detection monitoring at the site, and the preparation of a brief addendum to the existing site groundwater monitoring plan.

Groundwater Pump Test, Former Kmart Building and Proposed Costco Fresh, Bellevue, WA. Client - Costco Wholesale. Project Geologist responsible for sampling activities, data management and interpretation, and majority of report preparation for the performance of a pumping test at a former Kmart Building in Bellevue, WA. The project served to evaluate the need for dewatering during construction and operation of a building on the property. One extraction well was installed and a 24 hour pumping test was performed. The results were provided to the client's geotechnical consultant to facilitate the preparation of a dewatering plan.

Groundwater Remediation, Charles Street Fueling Station, Charles Street, Seattle, WA. Client - Seattle, City of. Project Manager responsible for sampling activities, data management and interpretation, and majority of report preparation for the oversight of a groundwater remediation activity at the Charles Street fueling station in Seattle, WA. The project involved the performance evaluation of an air sparging and vapor extraction system for the remediation of petroleum hydrocarbon contamination in groundwater. A geoprobe investigation was conducted to identify the nature and extent of contamination down-gradient, followed by the collection of soil, groundwater, and air samples. A subsequent routine monitoring program was developed and approved.

Groundwater Sampling and Analysis Plan (SAP), and Quality Assurance Project Plan (QAPP) Revisions, Coupeville Solid Waste Facility (CSWF), Coupeville, WA. Client - Island County Solid Waste Dept. Project Director responsible for technical guidance, project quality assurance (QA) and final document review for the preparation of groundwater sampling and analysis plan (SAP) and quality assurance project plan (QAPP) revisions for the Coupeville Solid Waste Facility in Coupeville, WA.

Groundwater Study, Saskatoon Chemical Plant, Saskatoon, Saskatchewan, Canada. Client - Sterling Pulp Chemicals LDT. Project Manager responsible for site inspection, technical evaluation, and report preparation for the development of groundwater study at a chemical plant

in Saskatoon, Saskatchewan. The project served to characterize groundwater discharges to surface springs and the south Saskatoon River adjacent to the plant. Tasks included groundwater modeling, seep sampling, aquifer testing , and the preparation of a report summarizing findings.

Groundwater Treatment Plant Operations & Maintenance (O&M), Umatilla Chemical Weapons Depot Superfund Site, Hermiston, OR. Client - US Army Corps of Engineers. Project Geologist responsible for environmental review for the operations and maintenance of a groundwater pump, treat, and reinjection plant at the Umatilla Chemical Weapons Depot Superfund site in Hermiston, OR. The treatment plant system processes about 1,300 GPM and uses activated carbon and polishing reactors followed by reinjection to flush contaminants from an old sludge lagoon contaminated with RDX and TNT. The project included quarterly to semi-annual groundwater monitoring to determine the progress of clean-up and ensure capture of the contaminant plume around the lagoon, and quarterly to semi-annual monitoring of groundwater at a closed landfill on the site.

Groundwater Treatment Plant Operations and Maintenance (O&M) and Landfill Monitoring, Umatilla Chemical Weapons Depot Superfund Site, Hermiston, OR. Client - US Army Corps of Engineers. Project Geologist responsible for environmental review for the performance of landfill monitoring and O&M of a groundwater treatment plant at the Umatilla Chemical Weapons Depot Superfund site in Hermiston, OR. Monitoring at the closed landfill site involves quarterly and semiannual groundwater monitoring. Groundwater treatment includes O&M of a treatment plant system that processes about 1,300 GPM and uses activated carbon and polishing reactors followed by reinjection to flush contaminants from an old sludge lagoon contaminated with RDX and TNT. The project included quarterly to semi-annual groundwater monitoring to determine the progress of clean-up, and ensure capture of the contaminant plume around the lagoon. A washout lagoon enhancement study was also performed.

Groundwater Well Monitoring Network Enhancement, Yakama Nation Landfill, Toppenish, WA. Client - Yakama Nation. Project Geologist responsible for contractor oversight for the installation, development, and sampling of additional groundwater monitoring wells at the closed Yakama Nation Landfill in Toppenish, WA. The project served to further develop the baseline groundwater conditions and establish recommendations for a long term groundwater monitoring program.

Landfill and Landfill Gas

Post-Closure Care (PCC), Coupeville Landfill, Coupeville, WA. Client - Island County Solid Waste Dept. Project Geologist responsible for project quality assurance (QA) and final document review for the performance of post-closure care at the Coupeville Landfill in Coupeville, WA. Tasks involve quarterly landfill gas and groundwater environmental monitoring, operations, maintenance, and reporting.

Post-Closure Groundwater Monitoring 1993, Lake Creek Landfill, Forks, WA. Client - Clallam County Public Works Dept. Project Geologist responsible for sampling activities, data management and interpretation, and majority of report preparation for the delivery of quarterly groundwater and surface water monitoring at the Lake Creek Landfill in Forks, WA. Activities were performed in accordance with applicable state solid waste landfill regulations to determine the annual rate and direction of groundwater flow below the landfill.

Post-Closure Groundwater Monitoring 1995, Lake Creek Landfill, Forks, WA. Client - Clallam County Public Works Dept. Project Geologist responsible for sampling activities, data management and interpretation, and majority of report preparation for the fifth year of continued quarterly groundwater monitoring at the Lake Creek Landfill in Forks, WA. The project involved the preparation of monitoring and laboratory testing reports and aquifer data analyses.

Post-Closure Groundwater Monitoring 1996-1999, Lake Creek Landfill, Forks, WA. Client - Clallam County Public Works Dept. Project Manager responsible for sampling activities, data management and interpretation, and majority of report preparation for the sixth year of continued quarterly groundwater monitoring at the Lake Creek Landfill in Forks, WA. The project involved the preparation of monitoring and laboratory testing reports and aquifer data analyses.

Post-Closure Groundwater Monitoring 2000, Lake Creek Landfill, Forks, WA. Client - Clallam County Public Works Dept. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the execution of semi-annual post-closure groundwater monitoring at the Lake Creek Landfill in Forks, WA. The project included sampling at four groundwater monitoring wells and two surface water streamside locations, aquifer testing, and groundwater flow determination. Letter reports and an annual report were prepared.

Post-Closure Groundwater Monitoring 2001, Lake Creek Landfill, Forks, WA. Client - Clallam County Public Works Dept. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the execution of semi-annual post-closure groundwater monitoring at the Lake Creek Landfill in Forks, WA. The project included sampling at four groundwater monitoring wells and two surface water streamside locations, aquifer testing, and groundwater flow determination. Letter reports and an annual report were prepared.

Post-Closure Groundwater Monitoring 2002, Lake Creek Landfill, Forks, WA. Client - Clallam County Public Works Dept. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the execution of semi-annual post-closure groundwater monitoring at the Lake Creek Landfill in Forks, WA. The project included sampling at four groundwater monitoring wells and two surface water streamside locations, aquifer testing, and groundwater flow determination. Letter reports and an annual report were prepared.

Post-Closure Groundwater Monitoring 2003, Lake Creek Landfill, Forks, WA. Client - Clallam County Public Works Dept. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the execution of semi-annual post-closure groundwater monitoring at the Lake Creek Landfill in Forks, WA. The project included sampling at four groundwater monitoring wells and two surface water streamside locations, aquifer testing, and groundwater flow determination. Letter reports and an annual report were prepared.

Post-Closure Groundwater Monitoring 2004-2006, Lake Creek Landfill, Forks, WA. Client - Clallam County Public Works Dept. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the performance of three years of semiannual post-closure groundwater monitoring at the Lake

Creek Landfill in Fork, WA. Tasks included water sampling at four groundwater wells and two surface water streamside locations, aquifer testing, and groundwater flow determination. Letter and annual reports were prepared.

Post-closure Groundwater Monitoring 2007-2009, Lake Creek Landfill, Forks, WA. Client - Clallam County Public Works Dept. Project Director responsible for technical guidance, project quality assurance (QA), and final document review for the performance of three years of semiannual post-closure groundwater monitoring at the Lake Creek Landfill site near Forks, WA. Tasks included water sampling at four groundwater wells and two surface water streamside locations, aquifer testing and groundwater flow determination. Letter and annual reports are prepared to communicate results.

Post-Closure Landfill Monitoring, Tulalip Landfill Superfund Site, Tulalip Tribes Reservation, Marysville, WA. Client - Waste Management - Waste Hauling. Team Member, Project Geologist responsible for sampling activities, data management and interpretation, and majority of report preparation for the performance of quarterly inspections and post-closure monitoring of potential leachate seeps at the 140-acre Tulalip Landfill Superfund Site in Marysville, WA. The project involved inspecting 16 locations around the perimeter of the closed landfill as well as monthly monitoring of the landfill gas system and leachate levels beneath the landfill cap. Tasks also included the evaluation of the data and reporting it to the EPA, client, and Tulalip Tribes.

Landfill Closure Construction Quality Assurance (CQA), Tulalip Landfill Superfund Site, Tulalip Tribes Reservation, Marysville, WA. Client - Waste Management - Waste Hauling. Project Geologist responsible for sampling activities, data management and interpretation, and majority of report preparation for the performance of closure construction quality assurance (CQA) and post-closure environmental monitoring of the 140-acre Tulalip Landfill Superfund Site in Marysville, WA. SCS was retained by WMI on behalf of EPA and the Tulalip Tribes to oversee the construction activities associated with the CERCLA closure of the Tulalip facility. As an independent third-party, SCS confirmed compliance with the Record of Decision (ROD) through on site inspections, field observation of fill placement and grading, fill quality, material testing management, surface water control measures, certification that activities were performed per the contract documents, and final construction oversight. During the closure activities, SCS provided field design support to address changes in conditions, and provided technical direction and oversight pertaining to site grading, waste excavation, and cover system construction. Following the closure, SCS prepared the closure certification remedial action report, the post-closure operations, maintenance, and monitoring plan, and implemented the post-closure monitoring program.

Landfill Gas (LFG) Data Monthly Review and Well Field Adjustment, Coupeville Solid Waste Facility (CSWF), Coupeville, WA. Client - Island County Solid Waste Dept. Project Geologist responsible for environmental review for the review of landfill gas data collected by another consultant and the Island County Health Department (ICHD) at the Coupeville Solid Waste Facility in Coupeville, WA. Tasks included the provision of recommendations for landfill gas system adjustments.

Landfill Gas (LFG) Migration Assessment and Gas Collection and Control System (GCCS) Plan, Addison Greens and River Trail Apartments, Puyallup, WA. Client - American Property Development. Project Director responsible for technical guidance, project quality assurance (QA) and final document review for the delivery of engineering services related to a closed landfill adjacent to an apartment complex in Puyallup, WA. Activities involved a review of the existing landfill gas migration and gas control system and performance of a landfill gas migration investigation for the owners of the adjacent apartments. The full scope of design services included document review, soil gas monitoring, assessment of landfill gas conditions, preliminary landfill gas system design, final design, construction, operations and maintenance manual development, startup and initial operations, routine operations, and maintenance. The gas migration investigation and assessment identified landfill gas in soils on the property occupied by the apartments and subsequent building monitoring was conducted to determine the presence of landfill gas in the structures. Options and recommendations for landfill gas mitigation were prepared along with a design upgrade for the existing landfill gas extraction system.

Landfill Gas (LFG) System Modifications and Site Redevelopment, Boeing Eastgate Landfill, Bellevue, WA. Client - Boeing. Project Geologist responsible for environmental review for the delivery of design services for modifying environmental controls at the closed Boeing Eastgate Landfill in Bellevue, WA. Tasks were associated with the encroachment of the Schnitzer West Advanta Office Park Development project. Design services included modifying portions of landfill gas control system, storm water drainage system, groundwater monitoring network, and landfill gas monitoring network. The gas system had to take into account the high water levels in the waste mass while providing gas extraction recovery of offsite migration and monitoring capabilities. In 2002 SCS was contracted by JGM Landscape Architects to provide an analysis of the site in support of the initial feasibility study. SCS was also responsible for constructing the original landfill gas system under contract to Boeing in 1986. The landfill facility was formerly owned by Boeing and is now owned by Schnitzer West and the City of Bellevue. Boeing owns the gas extraction system.

Landfill Groundwater Monitoring 2004, Friday Harbor Landfill, Friday Harbor, WA. Client - Friday Harbor, Town of. Team Member responsible for technical guidance, project quality assurance (QA) and final document review for the development and implementation of a management system for groundwater monitoring at the Friday Harbor Landfill in Friday Harbor, WA. Services included obtaining historic data and developing an electronic relational database, addressing deficiencies identified by regulators in previous reporting efforts, and managing ongoing groundwater monitoring and reporting including analysis of quarterly data and preparation of annual reports.

Landfill Groundwater Monitoring 2006, Friday Harbor Landfill, Friday Harbor, WA. Client - Friday Harbor, Town of. Team Member responsible for environmental review for the performance of on-going groundwater and landfill gas monitoring and reporting (2006) at the Friday Harbor Landfill in Friday Harbor, WA. Activities included groundwater sample collection, analysis of quarterly data, and preparation of the 2006 annual groundwater and landfill gas monitoring report.

Landfill Groundwater Monitoring 2007, Friday Harbor Landfill, Friday Harbor, WA. Client - Friday Harbor, Town of. Project Director responsible for technical guidance, project quality

assurance (QA) and final document review for the performance of on-going groundwater and landfill gas monitoring and reporting (2007) at the Friday Harbor Landfill in Friday Harbor, WA. Activities included groundwater sample collection, analysis of quarterly data, and preparation of the 2007 annual groundwater and landfill gas monitoring report.

Landfill Soil Monitoring, Everett Reclamation Landfill, Everett, WA. Client - Rinker Materials (WA). Project Geologist responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the preparation of Snohomish County Health District permit applications for the Everett Reclamation Landfill in Everett, WA. The project involved developing general and supplemental permits for problem waste treatment facilities and groundwater monitoring, and submitting applications inclusive of detailed operations, health and safety, soil sampling plans, and SEPA checklist.

Environmental Due Diligence, Rossman Landfill, Oregon City, OR. Client - CenterCal Properties LLC. Project Manager responsible for scheduling, staffing, subcontractor management, and document preparation for the performance of an AAI Phase I ESA at the Rossman Landfill in Oregon City, OR. The project was performed in accordance with All Appropriate Inquiry (AAI) and ASTM E-1527-05. Tasks consisted of a historical and air photo review, personal interviews, review of utility and site visit information, and the preparation of a report of findings. The AAI Phase I ESA also involved a technical review of approximately 190 environmental documents and provision of technical assistance for negotiation of a consent decree, and assistance with the refinement of site cleanup costs (primarily the installation and operation of a gas mitigation system).

Environmental Monitoring (2006), Olympic View Sanitary Landfill (OVSL), Port Orchard, WA. Client - Waste Management, Inc. Project Geologist responsible for environmental review for the performance of environmental monitoring in 2006 at the closed Olympic View Sanitary Landfill (OVSL) in Port Orchard, WA. Tasks involve monitoring and reporting for groundwater, landfill gas, leachate, and storm water. Previous work involved the repair and upgrade of the groundwater monitoring network and landfill gas extraction and monitoring system.

Environmental Monitoring (2007), Olympic View Sanitary Landfill (OVSL), Port Orchard, WA. Client - Waste Management, Inc. Project Director responsible for technical guidance, project quality assurance (QA) and final document review for the performance of environmental monitoring in 2007 at the closed Olympic View Sanitary Landfill (OVSL) in Port Orchard, WA. Tasks involve monitoring and reporting for groundwater, landfill gas, leachate, and storm water. Previous work involved the repair and upgrade of the groundwater monitoring network and landfill gas extraction and monitoring system.

Environmental Monitoring and Reporting, Capitol Disposal Landfill, Juneau, AK. Client - Waste Management Inc. Project Manager responsible for scheduling, staffing, and regulatory evaluation for the evaluation of monitoring data at the Capitol Disposal Landfill in Juneau, AK. Monitoring information was available for surface water, groundwater, landfill gas, and storm water collected at the facility. The project involved the preparation of monitoring reports and training facility personnel to collect environmental samples.

Environmental Monitoring, Olympic View Sanitary Landfill (OVSL), Port Orchard, WA. Client - Waste Management of Washington. Project Geologist responsible for environmental review for the repair and upgrade of the groundwater monitoring network and landfill gas extraction and monitoring system at the Olympic View Sanitary Landfill (OVSL) in Port Orchard, WA. Tasks also included the operations and maintenance of the landfill gas extraction system and leachate evaporator. Other activities included repairing the existing landfill gas control system and cover system. On-going environmental monitoring and reporting activities are being performed for groundwater, landfill gas, leachate, and storm water, associated with post-closure care, on a daily and quarterly basis.

Asbestos Survey, Rossman Landfill, Oregon City, OR. Client - CenterCal Properties LLC. Project Manager responsible for site inspection, technical evaluation, and report preparation for the completion of an asbestos survey at five buildings located in the vicinity of the Rossman Landfill in Oregon City, OR. The task supports the redevelopment of the site. A subcontractor was retained to collected a maximum of 50 samples of suspect building material for asbestos analysis and to provide an estimate of mitigation costs. The results were combined with an AAI Phase I ESA that was prepared for the site.

Storm Water

Storm Water Pollution Control (SWPC) Plan and Spill Prevention Control and Countermeasure (SPCC) Plan, Swan Island Pacific Rock Products Facility, 5555 N Channel Ave, Portland, OR. Client - Rinker Materials (WA). Project Manager responsible for scheduling, staffing, and regulatory evaluation for the preparation of a storm water NPDES permit application for a new sand and gravel operation at Swan Island located in Portland, OR. The work included completion of the permit application, preparation of a storm water pollution control (SWPC) plan, as well as a pill prevention control and countermeasure (SPCC) plan, and a site inspection. Training for facility staff on the collect of storm water compliance samples was also performed.

Storm Water Pollution Control (SWPC) Plan, Schooner Creek Transfer Station Compost Facility, Lincoln City, OR. Client - Schooner Creek Transfer, Inc. Project Manager responsible for scheduling, staffing, and regulatory evaluation for the preparation of a storm water pollution control (SWPP) plan at the Schooner Creek Transfer Compost Facility in Lincoln City, OR. Tasks involved a site drainage inspection, training facility staff to conduct storm water monitoring, preparation of a site drainage map and the SWPP under the 1200Z permit. A storm water sampling SOP was also prepared for facility staff.

Storm Water Pollution Control (SWPC) Plans, Canby Boble Quarry, Tualatin Concrete, Yoder Quarry Sites, Oregon. Client - Rinker Materials (WA). Project Manager responsible for scheduling, staffing, and regulatory evaluation for the development of storm water pollution control (SWPC) plans at four existing aggregate mining/processing operations at four Oregon locations. Work included site inspections and the modification of site drainage maps. Plans supported the renewal of Oregon Department of Environmental Quality (DEQ) sand and gravel general NPDES permit 1200-A.

Storm Water Pollution Prevention (SWPP) and Spill Prevention Control and Countermeasure (SPCC) Plans, Redmond, WA. Client - Aerojet. Project Manager responsible for scheduling, staffing, and regulatory evaluation for the development of a storm water pollution prevention

(SWPP) plan and spill prevention control and countermeasure (SPCC) plan for a 70-acre facility in Redmond, WA. The project involved the performance of site inspections, inventory of materials exposed to storm water, and evaluate spill potential. A site map was prepared along with inspection and storm water monitoring forms. Separate SWPP and SPCC plans suitable for regulatory review were prepared and a Notice of Intent Application (NIA) for the facility to obtain a storm water discharge permit was issued.

Storm Water Pollution Prevention (SWPP) Plan and Spill Prevention Control and Countermeasure (SPCC) Plan, Olympic View Transfer Station, Port Orchard, WA. Client - Waste Management of Washington. Project Manager responsible for scheduling, staffing, and regulatory evaluation for the development of both a storm water pollution prevention (SWPP) plan and spill prevention control and countermeasure (SPCC) plan at the Olympic View Transfer Station in Port Orchard, WA. The site includes a hauling facility, transfer station, maintenance shop, and recycle center. Tasks involved the performance of a site inspection, inventory of materials exposed to storm water and with spill potential, and the preparation of a site map and inspection and storm water monitoring forms. The SWPP and SPCC plans were prepared along with a brief sampling standard operating procedure. Subsequent facility staff training in the collection storm water samples was performed.

Storm Water Pollution Prevention (SWPP) Plan and Spill Prevention, Control, and Counter Measure (SPCC) Plans, Alaska. Client - Waste Management, Inc. Project Manager responsible for scheduling, staffing, and regulatory evaluation for the preparation SWPP plan and SPCC plan updates for waste collection facilities in Alaska. Project responsibilities included the performance of site inspections, oil/chemical inventories, interviews, preparation of site figures, and the completion of National Pollution Discharge Elimination System (NPDES) Notice of Intent (NOI) forms for sites requiring a storm water permit.

Storm Water Pollution Prevention (SWPP) Plan Notice of Intent, Seven Hauling Facilities, Washington and Idaho. Client - Waste Management - Oregon Waste. Project Manager responsible for scheduling, staffing, and regulatory evaluation for the preparation of a Notice of Intent and SWPP plans for each facility of seven waste handling facilities in Washington and Idaho. The project included site visits, drafting site drawings, training facility personnel to sample surface water, and the preparation of storm water plans using the client's template.

Storm Water Pollution Prevention (SWPP) Plan, Alaska Street Reload & Recycle Facility, Seattle, WA. Client - Waste Management of Washington. Project Manager responsible for scheduling, staffing, and regulatory evaluation for the preparation of a storm water pollution prevention (SWPP) plan at the Alaska Street Reload and Recycle Facility in Seattle, WA. The project included site inspection, inventory of materials exposed to storm water, preparation of site map, inspection, and monitoring forms. Facility staff were trained to collect storm water samples and provide brief sampling standard operating procedures.

Storm Water Pollution Prevention (SWPP) Plan, Auburn Plant, Auburn, WA. Client - USG Corporation. Project Manager responsible for scheduling, staffing, and regulatory evaluation for the development of a storm water pollution prevention (SWPP) plan for an industrial plant in Auburn, WA. The project involved storm water sampling and field tests for dissolved oxygen

(Duwamish River total maximum daily load), and training facility staff to collect storm water samples. A brief sampling standard operating procedures document was prepared.

Storm Water Pollution Prevention (SWPP) Plan, Harbor Island Facility, Seattle, WA. Client - Pendleton Flour Mills LLC. Project Geologist responsible for site inspection and plan preparation for the preparation of a SWPP plan at an industrial property on Harbor Island in Seattle, WA. The project was performed in compliance with the NPDES permit process. A storm water drainage map was prepared for the site followed by an environmental compliance audit.

Storm Water Pollution Prevention (SWPP) Plans, Kent and Renton, WA. Client - Ryder Systems. Project Manager responsible for scheduling, staffing, and regulatory evaluation for the completion of a SWPP plan at Ryder sites in Kent and Renton, WA. The project included site visits to determine runoff patterns, recommending best management practices (BMP) and development of two reports.

Storm Water Pond Evaluation, Woodinville Transfer Station and Recycling Center, Woodinville, WA. Client - Waste Management of Washington. Project Manager responsible for scheduling, staffing, and regulatory evaluation for the characterization of sediments in a storm water pond and on-site ditch at the Woodinville transfer station and recycling center in Woodinville, WA. The project included the excavation of sediments and restoration of the site.

Storm Water Sampling, Redmond, WA. Client - Aerojet. Project Manager responsible for scheduling, staffing, subcontractor management, and document preparation for the collection of storm water samples from 18 locations at the Aerojet facility in Redmond, WA. The samples were analyzed for metals and the results were presented in a letter report.

Storm Water Sampling, Testing, and Reporting Requirements Presentations, Washington. Client - Waste Management, Inc. Project Manager responsible for scheduling, staffing, and regulatory evaluation for the preparation of a presentation to address new storm water sampling, testing, and reporting requirements in Washington. Other tasks included the update of existing storm water pollution prevention (SWPP) plans and the preparation of a monitoring template to be completed by each facility. Personnel training to conduct in-house monitoring and reporting was also provided.

Storm Water Discharge Review, National Guard Facilities, Washington. Client - Washington State Army National Guard. Project Manager responsible for scheduling, staffing, and regulatory evaluation for the performance of a storm water discharge review at Washington Army National Guard facilities located throughout the state in an effort to properly manage their statewide storm water and industrial discharge programs. The project included review of existing storm water and oil-water separator permits/plans, discussions with regulatory agencies, preparation of recommendations, and preparing a proposal to help streamline WAARNG's storm water/wastewater programs.

Well Installation and Decommissioning

Well Abandonment, Manufacturing Facility, Marysville, WA. Client - Pacific Grinding Wheel. Project Director responsible for technical guidance, project quality assurance (QA) and final document review for the contracting of a Washington-licensed drilling firm to properly abandon

up to eight groundwater monitoring wells at a manufacturing facility in Marysville, WA. The wells had been installed several years ago subject property and were unmaintained.

Well and Boring Installation, East Fuel System Hydrant Pit, Yokota Air Force Base, Japan. Client - US Army Corps of Engineers. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the installation of a boring and well at the east fuel system hydrant pit at the Yokota Air Force Base in Japan. Task consisted of installing of an additional 15 m soil boring, construction of a soil vapor extraction system, and establishment of groundwater monitoring wells. Soil and groundwater sampling, and a remedial design for a pilot scale remediation system was also involved.

Well Decommissioning, Harris Property Adjacent to Manhattan Village Shopping Center, Normandy Park, WA. Client - Griffin & Jensen. Project Manager responsible for technical direction, budget management, scheduling, staffing, subcontractor management, and document preparation for the decommissioning of a 48-inch diameter domestic well located on the Harris property adjacent to the Manhattan Village Shopping Center in Normandy Park, WA. Work included providing access to well, subcontracting a state licensed well decommissioning contractor, and providing notice of well closure to Ecology.

Well Decommissioning, Station Park Property, Farmington, UT. Client - CenterCal Properties LLC. Project Director responsible for technical guidance, project quality assurance (QA) and final document review for the decommissioning of five groundwater wells and two septic systems at the Station Park Property in Farmington, UT. Tasks also included asbestos abatement from one structure on the Richards Dairy.

Well Decommissioning, Valley Centre Corporate Park, Auburn, WA. Client - Principal Real Estate Investors. Project Director responsible for technical guidance, project quality assurance (QA), and final document review for the proper abandonment of six shallow groundwater monitoring wells located at the Valley Centre industrial warehouse property in Auburn, WA.

Well Drilling, Bunker Hill Superfund Site, Kellogg, ID. Client - US Army Corps of Engineers. Project Geologist responsible for environmental review for the installation of monitoring wells at the Bunker Hill Superfund site in Kellogg, ID. The project involved drilling oversight, installation, and the development of ten monitoring wells. Drilling was performed using a Rotosonic drilling method. Cutting samples were continuously logged during drilling to characterize the formation. Wells ranged from 30-150 feet deep and were installed with dedicated low-flow QED bladder pumps in each new well. Two pumps were installed in each existing well. Additional work involved the closure/abandonment of two multiple completion wells and providing 19 stream gauge sets (without installation) to the client.