ALI KHATAMI, PH.D. P.E., LEP, CGC

Education

PhD - Civil Engineering, University of Mississippi, 1987
MS - Structural Engineering, University of Mississippi, 1980
BS - Mechanical Engineering, Abadan Institute of Technology, Abadan, Iran, 1977

Professional Licenses

Florida Professional Engineer (42621) (active)
Michigan Professional Engineer (62010338062) (inactive)
South Carolina Professional Engineer (15414) (inactive)
Utah Professional Engineer (10612) (inactive)
Wisconsin Professional Engineer (0060027715) (inactive)
Florida Licensed General Contractor (CGC060835) (active)
Florida Licensed Environmental Assessor (LEP195) (active)

Professional Affiliations

Solid Waste Association of North America (SWANA) – member Florida SWANA Chapter – member North Carolina SWANA Chapter – member International Solid Waste Association (ISWA) – member International Geosynthetics Society – member The International Society of Technical and Environmental Professionals – member American Society of Civil Engineers (ASCE) – member Chi Epsilon Honor Society - member

Professional Experience

- 2012-present: SCS Engineers, Vice President National Landfill Design Practice Leader
- 1997-2012: Globex Engineering & Development, President & CEO
- 1988-1997: Geosyntec Consultants, Solid Waste Program Manager
- 1983-1987: University of Mississippi, Research Associate
- 1981-1983: Sakhtban Company, Principal, Senior Engineer
- 1980-1981: Pars Company, Production Manager
- 1980-1980: Alborz Company, Quality Control Manager
- 1978-1980: University of Mississippi, Research Assistant
- 1977-1978: National Oil Company, Mechanical Engineer

Dr. Khatami has over 44 years of research and professional experience in the areas of mechanical, structural, and civil engineering. Dr. Khatami has been involved more than 33 years in the design and permitting of civil/solid waste/environmental projects; such as, surface water management systems, drainage structures, municipal solid waste landfills, hazardous solid waste landfills, low level radioactive waste landfills, leachate and wastewater conveyance and treatment systems, gas management systems, hazardous waste impoundments, storage tank systems, waste tire processing facilities, composting facilities, material recovery facilities, landfill gas collection and disposal systems, leachate evaporator systems, and liquid impoundment floating covers. Dr. Khatami has acquired extensive experience and knowledge in the areas of geology, hydrogeology, hydrology, hydraulics, construction methods, material science, construction quality assurance (CQA), and stability of earth systems. Dr. Khatami has applied this experience in the siting of numerous landfills.

Dr. Khatami has developed numerous concepts used in the design of various components of landfills and has coined terminologies for such concepts as noted below:

- Leachate Toe Drain System (LTDS)
- Rainwater Toe Drain System (RTDS)
- Gas Pressure Release System (GPRS) at Landfill Bottom Liner
- Tiered Vertical Gas Wells (TVGW)
- Landfill "Green" Design for Landfill Base Grades
- Landfill "Green-H" Design for Landfill Base Grades
- Landfill "Green+" Design for Landfill Base Grades
- Clog-Free Leachate Collection Pipe System (CFPIPE)

As a National Expert for Landfill Design, elevated temperature landfills, and Construction Quality Assurance for SCS and an executive member of the corporate office in the area of solid waste management, Dr. Khatami works with various offices of SCS on complicated technical matters, provides advice to technical professionals, provides technical presentations at conferences, provides national webinars, publishes technical papers and blogs, and prepares technical training material for internal use by SCS's professional staff.

Dr. Khatami has also been involved in remediation of many hazardous waste contaminated sites. Representative projects of Dr. Khatami's experience in this area are the Hardage Superfund Site in Oklahoma and LCP Chemicals site in Brunswick, Georgia. Furthermore, Dr. Khatami has been directly involved in performing landfill related work at the Wayne Disposal Hazardous Waste Landfill, Michigan; Low Level Radioactive Fernald Landfill, Ohio; Low Level Radioactive Barnwell Landfill, South Carolina; LCP Landfill, Georgia; and Peoria Hazardous Waste Landfill, Michigan.

Landfill Experience

Dr. Khatami has been involved in the design, permitting, and construction of over 200 landfills in the United States, Europe, and Middle East. A representative of these landfills are: Tri-County Landfill, Pennsylvania; Reed Landfill, Pennsylvania; Fulkroad Landfill, Pennsylvania; Southern Alleghenies Landfill, Pennsylvania; Riverdale Landfill, North Carolina; Dafter Landfill, Michigan; Wayne Disposal Hazardous Waste Landfill, Michigan; CSI Landfill, Arkansas; Carter Valley Landfill, Tennessee; Screaming Eagle Landfill, South Carolina; Low Level Radioactive Fernald Landfill, Ohio; Low Level Radioactive Barnwell Landfill, South Carolina; Earthmovers Landfill, Indiana; Bolton Landfill, Georgia; LCP Landfill, Georgia; Charles City Landfill, Virginia; Magnolia Landfill, Louisiana; LRC Landfill, Wisconsin; Guaynabo Landfill, Puerto Rico; Mead Depot Landfill, Ohio; Asuza Landfill, California; Town of Huntington Landfill, New York; Countryside Landfill, Illinois; 122nd Street Landfill, Illinois; Dolton Landfill, Illinois: Willow Ranch Landfill, Illinois: Prairie Bluff Landfill, Illinois: Grand Prairie Landfill, Illinois; Ojus Landfill, Florida; Kemper County Landfill, Mississippi; Clear View Landfill, Mississippi; Trail Ridge Landfill, Florida; Peoria Hazardous Waste Landfill, Michigan; Monarch Hill Landfill, Florida; Medley Landfill, Florida; Berman Road Landfill, Florida; Clay Farms Landfill, Florida; Naples Landfill, Florida; Gulf Coast Landfill, Florida; Southeast Landfill, Florida; Immokalee Landfill, Florida; Homestead Landfill, Florida; Glades County Landfill, Florida; Glades Landfill, Florida; Lee-Hendry Landfill, Florida; Royal Oaks Landfill, Florida; Deerfield Beach Old Landfill, Florida; Broward County Old Landfill, Florida; Peerless Landfill, Florida; Bayside Landfill, Florida; Palm Beach County Regional Resource Recovery Class I and Class III Landfills, Florida; SCMM Landfill, Florida; Deland Landfill, Florida; Bayside Landfill, Florida; Indian River County Landfill, Florida; Highlands County Landfill, Florida; Mount Dora Landfill, Florida, Surfside Landfill, Florida; North Dade Landfill, Florida; South Dade Landfill, Florida: Keene Road Landfill, Florida: North Manatee Landfill, Florida: Desoto Landfill, Florida; Fort Meade Landfill, Florida, Miami-Dade County Resources Recovery Monofill, Florida: JED Landfill, Florida: Penuelas Landfill, Puerto Rico: Zahle Landfill, Lebanon: Nizwa Landfill, Oman; Salalah Landfill, Oman; Dhafra Landfill, Oman; Abu Dhabi Landfill, United Arab Emirates; Seida Landfill, Lebanon; Tripoli Landfill, Lebanon; Beirolas Landfill, Portugal; Plumb Thicket Landfill, Kansas; Southside Landfill, Colorado; Seabreeze Landfill, Texas; LRI Landfill, Washington; Fresh Kills Landfill, New York: Jefferson Parish Landfill, Louisiana; NABORS Landfill, Arkansas; Burlington Landfill, New Jersey; City of Virginia Beach Landfill No. 2, Virginia; Cayey Landfill, Purto Rico; Pine Ridge Landfill, Griffin, Georgia: Potrero Hills Landfill, Suisun, California; Yarnell Road Landfill, Knoxville, Tennessee; Bethel Landfill, Hampton, Virginia; Middle Peninsula Landfill, Saluda, Virginia; Fort Irwin Landfill, Fort Irwin, California; Noble Hill Landfill, Springfield, Missouri; Virginia Beach Landfill, Virginia Beach, Virginia; L and D Landfill, Sacramento, California; Rhea County Landfill, Dayton, Tennessee: Eco Landfill, Atkinson, Illinois: Apex Landfill, Amsterdam, Ohio: Tomoka Landfill, Port Orange, Florida: Salinas Landfill, Puerto Rico: El Cogui Landfill, Purto Rico: Ponce Landfill, Purto Rico; Taylor County Landfill, Georgia; Eco Hill Landfill, Illinois; Zanker Road Landfill, San Jose, California; Rhea County Landfill, Rhea County, Tennessee; Otay Landfill, San Diego, California; DRD Landfill, Arcadia, Florida; East Milton Landfill, Sarasota, Florida; Axis Landfill, Mobil, Alabama; Turkey Trout Landfill, Mobil, Alabama; Simi Valley Landfill, Simi Valley, California; Valley Trail Landfill, Berlin, Wisconsin; SPSA Landfill, Norfolk, Virginia; Scholl Canyon Landfill, Glendale, California.

Dr. Khatami has significant experience in the design and construction of landfill gas collection and gas disposal systems. Dr. Khatami has designed numerous landfills with active and passive gas collection systems, permitted several leachate evaporator systems with beneficial reuse of the landfill gas. As the engineer of record for these facilities, Dr. Khatami has managed construction of these systems following completion of permitting. Dr. Khatami has been extensively involved in the preparation of Title V permit applications for utility and enclosed flare systems, solar flares, and gas collection systems.

Superfund and Hazardous Waste Experience

Dr. Khatami has been involved in remediation of many hazardous waste contaminated sites. Representative projects of Dr. Khatami's experience in this area are the Hardage Superfund Site in Oklahoma and LCP Chemicals site in Brunswick, Georgia. Also, Dr. Khatami has been directly involved in performing landfill related work at the Wayne Disposal Hazardous Waste Landfill, Michigan; Peoria Hazardous Waste Landfill, Michigan; and LCP Landfill at LCP Chemicals site, Georgia.

Expert Services Experience

Dr. Khatami has provided expert services to clients facing structural failure issues at their facilities, to legal counsels representing plaintiffs, to developers defending their planned projects before administrative judges, and to clients during resolution meetings with regulatory agencies.

Special Design Experience

Dr. Khatami has significant design and construction experience with low level radioactive landfills. Dr. Khatami performed as the resident engineer for the closure of the first geosynthetic cover system at the low level radioactive landfill in Barnwell, South Carolina. The cover system extended over trenches that had been filled for approximately 10 years, and contained waste grades A, B, and C. Dr. Khatami also performed as the project engineer for the design of a landfill for radioactive contaminated materials generated from the decommissioning of the Fernald Uranium Processing Facility located in Cincinnati, Ohio. The landfill was designed to perform for a 2,000-year period. The cross sections of the landfill and storm-water conveyance ditches were designed based on natural shapes of landforms and streams formed over thousands of years to minimize soil erosion from the landfill cover due to wind, and storm-water ditches due to water. The leachate collection system in the landfill was designed to minimize human involvement in the operation of the landfill over the next 2,000 years. Extensive compatibility tests were performed to evaluate effect of radioactive isotopes on the integrity of the geosynthetics used in the landfill lining system. The landfill cover system included components to prevent animals from burrowing over the 2,000 year period. Dr. Khatami was also involved in the permitting process for accepting hazardous waste as part of a transuranic waste being accepted at the Waste Isolation Pilot Plant (WIPP) facility in Carlsbad, New Mexico.

Books

BK93-01: Giroud, J.P., Beech, J.F. and Khatami, A., "Geosynthetics Bibliography", Volume 1, IGS, IFAI Publisher, St. Paul, Minnesota , USA, 1993, p. 781.

BK94-01: Giroud, J.P. Beech, J.F., Khatami, A., and Badu-Tweneboah, K., "Geosynthetics Bibliography", Volume 2, IGS, IFAI Publishers, St. Paul, Minnesota, USA, 1994, p. 940.

Articles

A84-01: George, K.P. and Khatami, A., "Pavement Management System -- A Review", The Mississippi State Highway Department Technical Conference, December 1984, p. 76.

A85-01: Khatami, A. and George, K.P., "Pavement Management System -- A Critical Review and Recommendations", The Mississippi State Highway Department Technical Conference, April 1985, p. 81.

A86-01: Khatami, A. and George, K.P., "Pavement Distress Manual", The Mississippi State Highway Department, Pavement Management Information System Conference, September 1986, p. 61.

A87-01: Khatami, A., "Data Automation in Pavement Management Information System", The Joint Conference of Louisiana and Mississippi ASCE Chapters, New Orleans, April 1987.

A87-02: Khatami, A., "Network Level Optimization/Prioritization Methodology for Pavement Rehabilitation", Ph.D. Dissertation, August 1987, p. 197.

A88-01: Khatami, A. and George, K.P., "Network Level Optimization/Prioritization for Pavement Rehabilitation", Transportation Research Record, No. 1196, 1988, pp. 224-233.

A88-02: George, K.P. and Khatami, A., "Optimal Decisions for Pavement Maintenance Management", Proceedings of the International Conference on Roads and Road Transport Problems, New Delhi, India, December 1988, pp. 96-103.

A89-01: Giroud, J.P., Khatami, A., and Badu-Tweneboah, K., "Evaluation of the Rate of Leakage through Composite Liners", Geotextiles and Geomembranes, Vol. 8, No. 4, 1989.

A89-02: Fluet, J.E., Jr., Badu-Tweneboah, K., and Khatami, A., "Geosynthetics Liner Systems", Proceedings of GRCDA Annual Conference, Tulsa, Oklahoma, August 1989.

A90-01: Giroud, J.P., Beech, J.F., and Khatami, A., "Stability of Solid Waste on Geosynthetic Lining System", Proceedings of the Fourth International Conference on Geotextiles, Geomembranes and Related Products, Vol. 2, The Hague, The Netherlands, May 1990.

A92-01: Fluet, J.E., Jr., Badu-Tweneboah, K., and Khatami, A., "A Review of Geosynthetic Liner System Technology", Waste Management & Research, Vol. 10, 1992, pp. 47-65.

A95-01: Badu-Tweneboah, K., Khatami, A., Williams, N.D., Clark, B.S., Soderman, K.L., and Giroud, J.P., "Geosynthetic Lining System for an Ash Monofill, Pompano Beach, Florida, USA", Geosynthetics Case Studies Book for North America, Bathurst, R., Ed., NAGS, 1995, pp. 36-37.

A95-02: Badu-Tweneboah, K., Williams, N.D., Khatami, A., Clark, B.S., Soderman, K.L., and Schauer, D.A., "Geosynthetics in a Landfill Expansion, Medley, Florida, USA", Geosynthetics Case Studies Book for North America, Bathurst, R., Ed., NAGS, 1995, pp. 26-27.

A95-03: Soderman, K.L., Clark, B.S., Bachus, R.C., Khatami, A., Badu-Tweneboah, K., and Williams, N.D., "Geosynthetics in Final Cover System for Municipal Solid Waste Landfills, Lake County, Illinois, USA", Geosynthetics Case Studies Book for North America, Bathurst, R., Ed., NAGS, 1995, pp. 8-9.

A97-01: Williams, N.D., Khatami, A., Khire, M.V., and Perera, N., "Selection Criteria and Performance Evaluation Methodology for Landfill Lining Systems", Proceedings of Environment '97, Cairo, Egypt, February 1997.

A98-01: Williams, N.D., and Khatami, A., "Methodology to Evaluate Environmental Priorities", Proceedings of the First International Economic Conference in Palestine, Palestine, Apr. 1998.

A13-01: Khatami, A., Clark, B., Clewner, M., "Pursuing Dynamic Compaction – Part 1", Waste 360, July-August, 2013, pp. 44-47, SCS Website <u>www.scsengineers.com</u>.

A13-02: Khatami, A., Clark, B., Clewner, M., "Pursuing Dynamic Compaction – Part 2", Waste 360, September, 2013, pp. 44-47, SCS Website <u>www.scsengineers.com</u>.

A13-03: Khatami, A., "Managing Leachate Seeps below Final Cover", Talking Trash of Waste Advantage Magazine, Fall-Winter 2013, p. 4, SCS Website <u>www.scsengineers.com</u>.

A14-01: Khatami, A., Clewner, M., VanGennip, K., "Long Term Care - The Use of Leachate Toe Drain Systems Can Deal With Seeps After a Landfill Has Been Covered", Waste 360, March, 2014, pp. 55-65, SCS Website <u>www.scsengineers.com</u>.

Page 5 of 14

A14-02: Khatami, A., "Managing Precipitation Infiltrating Into Final Cover", Talking Trash of Waste Advantage Magazine, Spring 2014, pp. 4-5, SCS Website <u>www.scsengineers.com</u>.

A14-03: Khatami, A., Ziegler, D., Jones, J., "Landfill Base Grades Optimization – A Mathematical Model for Sensitivity Analysis – Case I", 2014 Global Waste Management Symposium, Orlando, Florida, June 23-25, 2014, SCS Website <u>www.scsengineers.com</u>.

A14-04: Khatami, A., "Formulation for Sensitivity Analysis to Optimize Design of Pipe and Base Slopes in Landfills", Waste Advantage Magazine, August 2014, pp. 48-51, SCS Website <u>www.scsengineers.com</u>.

A14-05: Khatami, A., "Surface Water Management System Modeling and the Effect of Percolation in Sizing the System", Talking Trash of Waste Advantage Magazine, Summer 2014, pp.12-13, SCS Website <u>www.scsengineers.com</u>.

A14-06: Khatami, A., "A Collection and Removal System for Water in the Final Cover Drainage Layer", Waste Advantage Magazine, November 2014, pp 30-34, SCS Website <u>www.scsengineers.com</u>.

A14-07: Khatami, A., "Rule of Transmissivities at Material Interfaces in Landfill Leachate Collection Systems", Talking Trash of Waste Advantage Magazine, Fall/Winter 2014, pp.4-5, SCS Website <u>www.scsengineers.com</u>.

A15-01: Khatami, A., "Formulation for Sensitivity Analysis to Optimize Design of Pipe and Base Slopes in Landfills with a Double-Segment Herringbone Pattern", Waste Advantage Magazine, January 2015, pp 39-41, SCS Website <u>www.scsengineers.com</u>.

A15-02: Khatami, A., "Landfill Final Cover Management of Leachate Seeps Below Final Cover", The Journal of Solid Waste Technology and Management and Proceedings of the 30th International Conference on Solid Waste Technology and Management, Philadelphia, Pennsylvania, March 15-18, 2015, pp 62-70, SCS Website www.scsengineers.com.

A15-03: Khatami, A., Kundral, S, VanGennip, K, "Pass/Fail Criterion for HDPE Pipe Pressure Testing Using Incompressible Fluid", Talking Trash of Waste Advantage Magazine, Spring 2015, pp. 10-11, SCS Website <u>www.scsengineers.com</u>.

A15-04: Khatami, A., Khoury, N., "A Mathematical Model for Optimizing Design of Landfill Base Grades", American Society of Civil Engineers, Florida Chapter, Engineering Resilient Sustainability Conference 2015, Orlando, Florida, July 16-18, 2015, SCS Website <u>www.scsengineers.com</u>.

A15-05: Khatami, A., "Cleaning Leachate Collection Pipes Using High Pressure Jets", Talking Trash of Waste Advantage Magazine, Summer 2015, p. 10, SCS Website <u>www.scsengineers.com</u>.

A15-06: Khatami, A., "Formulation for Optimizing Landfill Base Slopes and Maximizing Airspace", Proceedings of the 15th International Waste Management and Landfill Symposium, Sardinia, Italy, October 5-9, 2015, p. 98, SCS Website <u>www.scsengineers.com</u>.

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A16-02: Khatami, A., "Leachate Collection Pipe Construction", MSW Management Magazine, July/August 2016, pp. 71-73, SCS Website <u>www.scsengineers.com</u>.

A17-01: Khatami, A., "Leachate Quantities after Closure of a Landfill", Talking Trash of Waste Advantage Magazine, Spring 2017, pp. 6-7, SCS Website <u>www.scsengineers.com</u>.

A17-02: Khatami, A., "Addressing High Gas Pressure near the Bottom of Landfills", Talking Trash of Waste Advantage Magazine, Summer 2017, p. 4, SCS Website <u>www.scsengineers.com</u>.

A17-03: Khatami, A., "Landfill Leachate Collection Pipe, SDR11 vs. SDR17 HDPE", Talking Trash of Waste Advantage Magazine, Fall/Winter 2017, p.12, SCS Website <u>www.scsengineers.com</u>.

A18-01: Khatami, A., Viswanathan, S., Fisher, D., "Considerations for the Piping Network – The Elements Needed for a Piping Network in a Gas Collection and Control System", MSW Management Magazine, March/April 2018, pp. 50-52, SCS Website <u>www.scsengineers.com</u>.

A18-02: Khatami, A., "Complexities of Managing a Deep Dynamic Compaction Project for the Green Developer", Talking Trash of Waste Advantage Magazine, Spring 2018, p. 9, SCS Website <u>www.scsengineers.com</u>.

A18-03: Viswanathan, S., Khatami, A., Fisher, D., "Construction Quality Assurance – Part 2 of a 3-part series on creating a landfill gas collection and control system", MSW Management Magazine, May 2018, pp. 64-69, SCS Website <u>www.scsengineers.com</u>.

A18-04: Khatami, A., "Qualifying Geosynthetic Materials for Construction of Landfill Lining Systems and Final Covers", Talking Trash of Waste Advantage Magazine, Summer 2018, pp. 8-9, SCS Website <u>www.scsengineers.com</u>.

A18-05: Fisher, D., Khatami, A., Viswanathan, S., "Designing for the Future – Part 3 of a series on LFG collection focuses on operation, monitoring, and maintenance", MSW Management Magazine, September/October 2018, pp. 28-32, SCS Website <u>www.scsengineers.com</u>.

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A19-01: Khatami, A., "Leachate Pumping System Performance: Evaluation after Expanding Landfill Footprint and Use of Booster Pumps", Talking Trash of Waste Advantage Magazine, Spring 2019, pp. 10-11, SCS Website <u>www.scsengineers.com</u>.

A19-02: Khatami, A., "Landfill Leachate Removal Pumps – Submersible vs. Self-Priming Pumps", Talking Trash of Waste Advantage Magazine, Summer 2019, pp. 4-5, SCS Website <u>www.scsengineers.com</u>.

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A20-01: Khatami, A., "Landfill Gas Header: Location and Benefits", Talking Trash of Waste Advantage Magazine, Spring 2020, pp. 8-9, SCS Website <u>www.scsengineers.com</u>.

A20-02: "Emerging Design Concepts to Facilitate Flow of Liquids on Landfills", contributor to article in Waste 360, April 8, 2020, SCS Website <u>www.scsengineers.com</u>.

A20-03: Khatami, A., "Considerations for Design of Gas Collection Systems for Landfills", Waste Advantage, June 2020, pp. 48-50, SCS Website <u>www.scsengineers.com</u>.

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A21-01: Khatami, A., "Gas and Liquid Carrying Pipes in Landfills and Complexity of Conflicts", Talking Trash of Waste Advantage, Spring 2021, pp. 8-9, SCS Website <u>www.scsengineers.com</u>.

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B16-04: Khatami, A., "SCS Advice from the Field: Avoid geotextile clogging of leachate collection pipes", SCS Website <u>www.scsengineers.cm</u>, February 24, 2016.

B16-05: Khatami, A., "SCS Advice from the Field: Recommendations for Jet Cleaning Leachate Collection Pipes", SCS Website <u>www.scsengineers.com</u>, March 2, 2016.

B16-06: Khatami, A., "SCS Advice from the Field: How to Manage Leachate Seeps Below the Final Landfill Geomembrane Cover", SCS Website <u>www.scsengineers.com</u>, March 23, 2016.

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B16-08: Khatami, A., "SCS Advice from the Field: How to Increase the Flow Capacity of the Final Cover Drainage Layer Over a Concaved Portion of a Landfill Slope", SCS Website <u>www.scsengineers.com</u>, May 17, 2016.

B17-01: "SCS Top 10 Upstream Measures to Prevent Landfill Leachate Generation", SCS Website <u>www.scsengineers.com</u>, July 2017.

B17-02: Khatami, A., "Vertical Drains in Landfills Offer More Efficient Leachate and Gas Collection Reducing Capital Investment", SCS Website <u>www.scsengineers.com</u>, August 14, 2017.

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B17-04: Khatami, A., "SCS Advice from the Field: Prevent Sump Clogs as Part of Regular Leachate Collection Pipe Maintenance", SCS Website <u>www.scsengineers.com</u>, August 28, 2017.

B17-05: Khatami, A., "SCS Advice from the Field: Landfill Odor Control Using Temporary Pin Wells", SCS Website <u>www.scsengineers.com</u>, September 5, 2017.

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B19-01: Khatami, A., "SCS Advice from the Field: Maximizing Leachate Pumping System Performance after Expanding Landfill Footprint", SCS Website <u>www.scsengineers.com</u>, February 13, 2019.

B19-02: Khatami, A., "Choosing the Right Landfill Designer is Crucial to an Operator", SCS Website <u>www.scsengineers.com</u>, July 9, 2019.

B19-03: Khatami, A., "SCS Advice from the Field: Landfill Leachate Removal Pumps", SCS Website <u>www.scsengineers.com</u>, August 5, 2019.

B19-04: Khatami, A., "Q&A with Ali Khatami – Jet Cleaning Leachate Collection Pipes", SCS Website <u>www.scsengineers.com</u>, August 21, 2019.

B19-05: Khatami A., "SCS Advice from the Field: The Real Cost of Terraces on Landfill Slopes", SCS Website <u>www.scsengineers.com</u>, August 26, 2019.

B19-06: Khatami, A., "SCS Advice from the Field: Landfill Leachate Removal Pumps – Submersible vs. Self-Priming Pumps", SCS Website <u>www.scsengineers.com</u>, September 3, 2019.

B19-07: Khatami, A., "SCS Advice from the Field: Pressure Release System near Bottom of Landfills", SCS Website <u>www.scsengineers.com</u>, September 23, 2019.

B19-08: Khatami, A., "SCS Advice from the Field: Leachate Force Main Casing Pipe and Monitoring for Leaks", SCS Website <u>www.scsengineers.com</u>, October 22, 2019.

B19-09: Khatami, A., "SCS Advice from the Field: Gas Removal from Leachate Collection Pipe and Leachate Sump", SCS Website <u>www.scsengineers.com</u>, October 29, 2019.

B19-10: Khatami, A., "SCS Advice from the Field: AIRSPACE: The Landfill Operators' Golden Egg", SCS Website <u>www.scsengineers.com</u>, November 20, 2019.

B20-01: Khatami, A., "SCS Advice from the Field: Landfill Gas Header: Location and Benefits", SCS Website <u>www.scsengineers.com</u>, January 13, 2020.

B20-02: Khatami, A., "SCS Advice from the Field: Landfill Airspace: Are You Maximizing Your Greatest Asset?", SCS Website <u>www.scsengineers.com</u>, May 20, 2020.

B20-03: Khatami, A., "SCS Advice from the Field: Landfill Leachate Seeps – Prepare Ahead to Avoid Consequences", SCS Website <u>www.scsengineers.com</u>, June 22, 2020.

B20-04: Khatami, A., "SCS Advice from the Field: Final Cover System and Landfill Gas Piping – Design Considerations", SCS Website <u>www.scsengineers.com</u>, June 24, 2020.

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B20-06: Khatami, A., "SCS Advice from the Field: Temporary Caps – Becoming a No-Brainer for Landfills", SCS Website <u>www.scsengineers.com</u>, July 15, 2020.

B20-07: Khatami, A., "SCS Advice from the Field: Elevated Temperature Conditions in Landfills – Sharing Innovative Designs and Strategies", SCS Website <u>www.scsengineers.com</u>, July 20, 2020.

B20-08: Khatami, A., "SCS Advice from the Field: Dynamic Compaction – An Effective and Viable Option for Land Redevelopment", SCS Website <u>www.scsengineers.com</u>, July 27, 2020.

B20-09: Khatami, A., "SCS Advice from the Field: Long Term Performance of Landfill Final Cover", SCS Website <u>www.scsengineers.com</u>, November 16, 2020.

B20-10: Khatami, A., William Richardson, "SCS Advice from the Field: Familiarization with Site History before Design Work for Landfills", SCS Website <u>www.scsengineers.com</u>, November 23, 2020.

B20-11: Khatami, A., William Richardson, "SCS Advice from the Field: Standard Coordinate Systems for Landfill Topographic Maps", SCS Website <u>www.scsengineers.com</u>, November 30, 2020.

B20-12: Khatami, A., "SCS Advice from the Field: Knowledge of Landfill Sites and Efficacy of Conducting Due Diligence", SCS Website <u>www.scsengineers.com</u>, December 21, 2020.

B20-13: Khatami, A., "SCS Advice from the Field: Landfills Partial Final Covers and Associated Features", SCS Website <u>www.scsengineers.com</u>, December 28, 2020.

B21-01: Khatami, A., "Innovative Landfill Design Technologies and Industry Pioneers", SCS Website <u>www.scsengineers.com</u>, January 19, 2021.

B21-02: Khatami, A., "Should We End the Herringbone's 50-Year Reign in Landfill Design", SCS Website <u>www.scsengineers.com</u>, February 22, 2021.

National Webinars

W15-01 - Khatami, A., Khoury, N., Tindell, B., "Rainwater Toe Drain System for Landfill Final Covers", SWANA Webinar, June 10, 2015.

W15-02 - Khatami, A., "Managing Seeps below Landfill Final Cover – A Leachate Toe Drain System", SWANA Webinar, December 2, 2015.

W16-01 - Khatami, A., "An Innovative Design for Leachate Collection Pipes to Eliminate Geotextile Clogging", SWANA Webinar, August 31, 2016.

W20-01 – Khatami, A., Hostetter, D., Lukacs, L., "Planning Landfills, Technology, and the Future", U.S. Green Building Council Panel Discussions, December 3, 2020.

Public Presentations

P13-01: Khatami, A., Heikkinen, W., Cathrall, R., "Alternative Landfill Final Cover, Airspace Optimization and Long Term Care Maintenance", SWANA Alabama Chapter - 2013 Fall Conference, Guntersville, Alabama, November 6-8, 2013.

P14-01: Khatami, A., "Managing Leachate Seeps Below Final Cover", SWANA Mississippi Chapter - 2014 Spring Conference, Bay St. Louis, Mississippi, May 6-8, 2014.

P14-02: Khatami, A., "Managing Leachate Seeps Below Landfill Final Cover", SWANA South Carolina Chapter – 2014 Spring Conference, Pawleys Island, South Carolina, May 7-9, 2014.

P14-03: Khatami, A., "Managing Leachate Seeps Below Final Cover", SWANA Georgia Chapter – 2014 Spring Conference, Brasstown Valley, Georgia, April 7-9, 2014.

P14-04: Khatami, A., Ziegler, D., Jones, J., "Landfill Base Grades Optimization – A Mathematical Model for Sensitivity Analysis – Case I", 2014 Global Waste Management Symposium, Orlando, Florida, June 23-25, 2014.

P15-01: Khatami, A., "Landfill Final Cover Management of Leachate Seeps Below Final Cover", The 30th International Conference on Solid Waste Technology and Management, Philadelphia, Pennsylvania, March 15-18, 2015.

P15-02: Khatami, A., Khoury, N., Tindell, B., "Rainwater Toe Drain System for Landfill Final Covers", SWANA Landfill Symposium, New Orleans, Louisiana, March 16-19, 2015.

P15-03: Khatami, A., Khoury, N., "A Mathematical Model for Optimizing Design of Landfill Base Grades", American Society of Civil Engineers, Florida Chapter, Engineering Resilient Sustainability Conference 2015, Orlando, Florida, July 16-18, 2015.

P15-04: Khatami, A., "Formulation for Optimizing Landfill Base Slopes and Maximizing Airspace", 15th International Waste Management and Landfill Symposium, Sardinia, Italy, October 5-9, 2015.

P16-01: Khatami, A., "Landfill Leachate Collection Pipe Design", SWANA North Carolina Chapter – 2016 Spring Conference, Greensboro, North Carolina, April 27, 2016.

P16-02: Khatami, A., "Landfill Leachate Collection Pipe Design", SWANA Mississippi Chapter – 2016 Spring Conference, Biloxi, Mississippi, May 17, 2016.

P16-03: Khatami, A., "Landfill Leachate Collection Pipe Design", SWANA South Carolina Chapter – 2016 Spring Conference, Pawley's Island, South Carolina, May 19, 2016.

P16-04: Khatami, A., "Landfill Leachate Collection Pipe Design", SWANA Virginia Chapter – 2016 Spring Conference, Virginia Beach, Virginia, May 20, 2016.

P16-05: Khatami, A., "Leachate Toe Drain System in Landfill Final Covers", SCS Engineers 2016 Fall Landfill Seminar, Charlotte, North Carolina, October 7, 2016.

P17-01: Khatami, A., "Leachate Seeps below Landfill Final Covers – How to Collect and Dispose", SWANA Landfill Symposium – SWANApalooza 2017, Reno Nevada, March 29, 2017.

P17-02: Khatami, A., "Leachate Seep Collection and Management System below Landfill Final Covers", SWANA North Carolina Chapter – 2017 Spring Conference, Asheville, North Carolina, April 5, 2017.

P17-03: Khatami, A., "Landfill Final Cover and Water in the Drainage Layer – How to Collect and Remove", SWANA Northwest Regional Symposium – 2017, Tulalip, Washington, April 27, 2017.

P17-04: Khatami, A., "A Collection and Management System for Water in Landfills Final Cover Drainage Layer", SWANA Mississippi Chapter – 2017 Spring Conference, Biloxi, Mississippi, May 17, 2017.

P17-05: Khatami, A., "A Collection and Management System for Water in Landfills Final Cover Drainage Layer", SE Region Solid Waste Seminar, West Palm Beach, Florida, July 24, 2017.

P17-6: Samuels, D., Khatami, A., "10 Tips for Preventing Landfill Leachate", Waste 360 Slideshow, July 18, 2017.

P17-07: Khatami, A., "Management of Water in the Final Cover of Dumpsites", ISWA World Conference, Baltimore, Maryland, September 26, 2017.

P18-01: Khatami, A., Peterson, E.R., Gardner, R.B., Walsh, J.J., "Preventing Formation of Elevated Temperature Conditions in Landfills – Design Features for Management of Liquids and Gas Pressure", Global Waste Management Symposium 2018, Indian Wells, California, February 13, 2018.

P18-02: Khatami, A., "Surface Water Runoff Downchute System", SWANA Mississippi Chapter – 2018 Spring Conference, Bay St. Louise, Mississippi, May 16, 2018.

Educational Presentations

E15-01: Khatami, A., "Rainwater Toe Drain System for Landfill Final Cover", SCS Learning Management System, June 2015.

E15-02: Khatami, A., Formulation for Optimizing Landfill Base Slopes and Maximizing Airspace", SCS Learning Management System, October 2015.

E16-01: Khatami, A., "Managing Leachate Seeps Below Landfill Cover – A Leachate Toe Drain System", SCS Learning Management System, January 2016.

E16-02: Khatami, A., "Leachate Sump Station", SCS Learning Management System, January 2016.

E16-03: Khatami, A., "Landfill Leachate Collection Pipe Design", SCS Learning Management System, January 2016.

E16-04: Khatami, A., "Innovative Landfill Designs", SCS Learning Management System, February 2016.

E16-05: Khatami, A., "Surface Water Swales and Downchutes in Landfill Final Covers", SCS Learning Management System, February 2016.

E17-01: Khatami, A., "Cleanouts on Leachate Force Main", SCS Learning Management System, January 2017.

E17-02: Khatami, A., Gas Removal from Leachate Collection Pipe Systems", SCS Learning Management System, January 2017.

E17-03: Khatami, A., "Use of Geogrid in Landfill Lining Systems", SCS Learning Management System, January 2017.

E17-04: Khatami, A., "Pressure Testing of HDPE Pipes Using Incompressible Fluids – Ambient Temperature Effect", SCS Learning Management System, February 2017.

E17-05: Khatami, A., "Perforated and Non-Perforated Centralizers on Double-Cased Pipes", SCS Learning Management System, February 2017.

E17-06: Khatami, A., "Temporary Cap over Landfill Slopes", SCS Learning Management System, February 2017.

E17-07: Khatami, A., Double-Cased Pipe Pressure Testing", SCS Learning Management System, February 2017.

E17-08: Khatami, A., "Final Cover Geocomposite Drainage Layer over Concaved Surfaces", SCS Learning Management System, February 2017.

E20-01: Khatami, A., "Leachate Toe Drain System", November 24, 2020, SCS Landfill University Lecture.

E21-01: Khatami, A., "Rainwater Toe Drain System for Landfill Final Covers", January 21, 2021, SCS Landfill University Lecture.

E21-02: Khatami, A., "Surface Water Control System on Landfill Slopes", May 25, 2021, SCS Landfill University Lecture.

E21-03: Khatami, A., "Landfill Green Design", September 28, 2021, SCS Landfill University Lecture.

E22-01: Khatami, A., "Mathematical Model for Evaluating Base Grades – Herringbone Pattern", January 25, 2022, SCS Landfill University Lecture.

E22-02: Khatami, A., Curtis, R., "Design of Geocomposite Drainage Layer for Bottom Lining Systems", September 13, 2022, SCS Landfill University Lecture.

E22-03: Khatami, A., Isenberg, B., "Preventing Formation of Elevated Temperature Conditions in Landfills", October 11, 2022, SCS Landfill University Lecture.

E23-01: Khatami, A., "Transmissivity of Planar Geosynthetics", February 28, 2023, SCS Landfill University Lecture.

E23-02: Khatami, A., "Green Design, an Alternative Base Grading", April 11, 2023, SCS Landfill University Lecture.

E23-03: Khatami, A., "Terraces on Landfill Slopes", May 9, 2023, SCS Landfill University Lecture.