

Mark Huggard

Senior Technician



Education

- Coursework, San Diego State University
- Coursework, Soil Mechanics, 1988

Registration and Certification

- GSI-Certified CQA Inspector for Geosynthetics and CCLs
- NICET Certification in Construction Technology and Geosynthetics
- 40-Hour OSHA Trained, 29 CFR 1910.120(e)(2)/8 CCR 5192
- Certified Nuclear Density Gauge Operator
- ACI Level I Inspector

Experience

40 years

With AES

15 years

Mark Huggard has over 40 years experience in CQA and CM support for landfill closures and composite liners involving earthwork, geosynthetics and concrete and LFG improvements. Mark is an ACI-certified Concrete Inspector and GSI-certified CQA Inspector for soils and geosynthetics. He has served as Lead CM/CQA Monitor for a number of final closure projects including Big Bear, Apple Valley, Lenwood-Hinkley, OII and Double Butte Landfills. He has also been the Lead CQA Monitor for earthwork, clay liner and cover construction, geosynthetic liner construction, and LCRS installation for 15 landfill projects in Southern California, including Landers Sanitary Landfill Septic Ponds Modifications and Land Farm Liner project and San Timoteo Sanitary Landfill Unit 2, Phase 3 expansion. He also served as the Lead CQA Monitor for the 26-acre Lamb Canyon Phase 2, Stage 3 expansion that won the “Outstanding Project” award by the APWA’s Riverside County and San Bernardino County chapters. He was the Lead CQA Monitor for composite liner construction for the 27-acre Phase 2 expansion for Puente Hills Landfill and five phases of FRB Landfill involving composite liner construction for about 150 acres including Phase VIIA and VIIB totaling 50 acres. He served as Resident CQA Manager for the 130-acre OII Landfill closure involving over 1.5 million cu. yds. of monocover, 1.5 million sq. ft. of GCL for top deck, and 1.8 million sq. ft. of geogrids for steep side slopes. He also served as Lead CQA Monitor for the Cell 1 liner expansion project at Mesquite Regional Landfill. Mark has observed and performed CQA testing for 12 clay/low permeability liner and three final cover test pad programs. Mark also brings CQA experience involving over 50 million cu. yds. of engineered fills for mass grading projects and large earth/rockfill dams. He has led and trained CQA teams, including up to six to seven CQA Monitors for field and laboratory soils testing on landfill projects, mass grading projects, and earthfill dam projects. Mark also enjoys a strong rapport with Client’s project personnel for his responsive services and is well respected by regulatory personnel for his attention to quality and detail.

His relevant experience includes:

- **Big Bear Sanitary Landfill, San Bernardino County, California**
Lead CQA Monitor and Resident CM Support during CM services for the final closure construction project for the 79-acre landfill involving 5-foot thick monolithic cover on slopes and geomembrane/soil cover on top deck, benches and access road. Also provided CQA services for drainage structures, roads, fencing, LFG headers and LFG monitoring probe installation.
- **Landers Sanitary Landfill, San Bernardino County, California**
Lead CQA Monitor during CM/CQA services for Septic Ponds Modifications and Land Farm Liner project. Duties included CQA observation and testing for earthworks and geosynthetics, including HDPE geomembrane, drainage geocomposite and geotextiles, and concrete and AC for roads, drainage structures and aprons.

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- **Apple Valley Sanitary Landfill, San Bernardino County, California**

Lead CQA Monitor for the CM and CQA services for the final closure construction project for the 40-acre landfill. The project work tasks included monitoring screening and processing of minus 3-inch final cover material, evaluation and testing of demonstration fill, CQA for about 150,000 cu. yds. of processed material including foundation layer and 2-foot thick final cover, and verification of thickness of final as-built cover. Also provided CQA services for drainage structures, roads, LFG monitoring probe extension, and site security, including tortoise fence installation.

- **Lenwood Hinkley Sanitary Landfill, San Bernardino County, California**

Lead CQA Monitor for the CM and CQA services for the ongoing final closure construction project involving final cover construction on 50 acres of landfill footprint. The project features screening of stockpiled final cover materials, final cover demonstration fill, excavation of final cover from onsite borrow areas, construction of drainage structures, installation of six perimeter LFG probes and ten LFG vents, and erosion control measures. Tasks being performed include CQA observation and testing of subgrade and final cover placement, performance of field permeability tests on final cover, collection of samples for laboratory testing, inspection of Contractor's daily activities, and preparation of daily reports including equipment and manpower utilization.

- **San Timoteo Sanitary Landfill, San Bernardino County, California**

Lead CQA Monitor during CM/CQA services for Unit 2, Phase 3 expansion involving 6,000 cu. yds. of clay liner, 400,000 cu. yds. of engineered fill and over 1.5 million sq. ft. of geosynthetics installation including HDPE geomembrane, GCL, geotextile and protective membrane.

- **Lamb Canyon Landfill, Riverside County, California**

Lead CQA Monitor for the 26-acre Phase 2, Stage 3 expansion including testing for earthworks and geosynthetics. Performed QA/QC services for approximately 25,000 cu. yds. of clay liner, 400,000 cu. yds. of engineered fill and 5.4 million sq. ft. of geosynthetics including HDPE geomembrane, GCL and geotextile.

Lead CQA Monitor during construction of a reinforced earth wall to stabilize slope below PERG facility. The project involved geologic mapping of backcut and CQA during construction of stabilization fill.

- **Frank R. Bowerman Landfill, Orange County, California**

Lead CQA Monitor for Phase VIIA composite liner involving 22 acres of cell expansion with Title 27 liner, including 60,000 cu. yds. of low-permeability liner and 2.8 million sq. ft. of geosynthetics.

Lead CQA Monitor for Phase VIIB composite liner involving 27 acres of landfill expansion, including 50,000 cu. yds. of clay liner and 3.9 million sq. ft. of geosynthetics.

Lead Technician for Phases I, II and IV responsible for direction of earthwork activities for 5 million cu yds of materials and CQA for 4 million sq. ft. of geosynthetics and LCRS construction.

- **Mesquite Regional Landfill, Imperial County, California**

Lead CQA Monitor during composite liner construction for the 7-acre Cell 1 expansion, involving 1.6 million sq. ft. of geosynthetics, including HDPE geomembrane, GCL, and geotextiles.

- **Puente Hills Landfill, Los Angeles County, California**

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Lead Earthworks Monitor during composite liner construction for 27-acre Phase 2 expansion including 45,000 cu yds of clay liner and over 4 million sq. ft. of geosynthetics, including 80-mil HDPE, GCL, geonet and drainage geocomposite.

- **Badlands Landfill, Riverside County, California**

(Working for the County of Riverside): *Supervision and Oversight of Contractor and QA Consultant* for Canyon 4, Phase 2 composite liner construction involving 2 million cu. yds. of rock excavation, 200,000 cu. yds. of engineered fill, and 10,000 cu. yds. of compacted soil liner and geosynthetic liner for a 22-acre cell expansion. Geosynthetics included over 2.7 million sq. ft. of HDPE, GCL, and geotextiles. Project featured liner installation on steep 1:1 Side slopes treated with shotcrete.

Lead CQA Monitor during construction of the composite liner system for landfill expansion covering 15 acres. Provided QA/QC monitoring and testing for clay borrow operations, production pad construction and clay liner placement. Performed geotechnical index tests and BATMM tests, and collected thin-walled tube samples for laboratory permeability testing.

- **Operating Industries Inc. (OII) Landfill, Monterey Park, California**

Lead Technician for the moisture monitoring of final cover system involving installation of 32 TDR probes and evaluation of final cover performance.

Resident CQA Lead Monitor for all earthworks, geosynthetics and surface drainage, including desilting basin structures for final closure of the 145-acre hazardous waste landfill. Activities included placement of 1.5 million cu yds of moncover fill material on landfill side slopes, 1.8 million sq. ft. of geogrids for stabilization of 1.5:1 side slope, 1.9 million sq. ft. of GCL for top deck and construction of surface drainage structures, including concrete channels and desilting basins. Responsible for directing a CQA team of 5-6 field technicians.

- **Spadra Landfill, Los Angeles County, California**

Lead Monitor for final cover characterization of side slopes to evaluate suitability of existing material as moncover including 73 hard auger borings, insitu BATMM tests and laboratory permeability tests.

- **West Riverside Landfill, Riverside County, California**

Lead CQA Monitor during construction of final cover for 40-acre Landfill Closure including placement of foundation layer, low permeability clay cover and vegetative layer.

- **Double Butte Landfill, Riverside County, California**

Lead CQA Monitor for 100-acre Landfill Closure using prescriptive cover. Responsibilities included CQA observation and testing of foundation layer and CQA for processing 50,000 cu yds of low permeability layer of final cover.

- **Coyote Canyon Landfill, Orange County, California**

Field QA/QC Monitor for Borrow Area Evaluation and observation and testing during repairs to final cover as a part of on-call geotechnical services for final cover monitoring and maintenance.

- **McFarland-Delano Landfill, Kern County, California**

Lead Technician providing closure construction QA/QC during closure of the 40-acre landfill. Observed and documented construction of foundation layer, low-permeability-barrier layer, and vegetative soil cover.

- **Mica Dam, Revelstoke Earthfill Dam, and Peace River Dam, British Columbia, Canada**

Earthworks Technician and Inspector for three large dams involving over 60 million cu. yds. of earth and rockfill, riprap, and slope protection and concrete inspection.
