

# **Travis Dagdigian**

## ***Associate Geologist***

### **Waterstone Environmental, Inc.**

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Mr. Dagdigian is an Associate Geologist at Waterstone Environmental and has been involved in the environmental industry since joining Waterstone in 2012. His primary responsibilities include fieldwork activities and management, supervision of subcontractor operations, spreadsheet and data management, assistance in managing and performing environmental site assessments and remediation projects, report preparation, and litigation support. Most of his responsibilities include assisting in the preparation and implementation of workplans for soil, soil vapor and groundwater sampling and remediation projects, management of fieldwork activities, project management support, and aerial photogrammetry specialization including in depth analysis of aerial photographs, stereoscopy, and 3D visualization.

Mr. Dagdigian has assisted in the pre-field planning of numerous types of investigation activities; including preparing sampling and remediation workplans, project proposals and budgets, procuring permits, working with laboratories performing analytical testing, and coordinating with drilling and construction subcontractors. Mr. Dagdigian has extensive experience involving soil sampling, groundwater monitoring well installation and sampling, soil vapor well installation and sampling, and supervision of an assortment of crews in relation to hand augering, grading oversight, hollow stem drill rigs, direct push drill rigs, Membrane Interface Probes (MIP) and Cone Penetrometer (CPT) units. In addition to implementing the scope of work, Mr. Dagdigian is experienced in data management and evaluation, preparation of geologic soil borings, report preparation, and litigation support.

#### **Education**

- B.S. Geological Sciences, Minor in Environmental Sciences, University of Southern California, 2012.
- Certificate of Environmental Management (CEM), University of California-Irvine, 2019

#### **Specialized Training**

- OSHA 40-HR HAZWOPER Training, 2010-Current
- CPR and First Aid Training, 2017

#### **Project Capabilities**

- Phase I and Phase II Environmental Site Assessments
- Installation and Sampling of Groundwater Monitoring Wells
- Installation and Sampling of Soil Vapor Wells
- Soil Sampling, Logging and Electronic Boring Log Creation
- Supervision of Direct Push and Hollow Stem Auger Boring Machines
- Supervision of Membrane Interface Probe (MIP) and Cone Penetrometer Test (CPT) Rigs
- Operation of Direct Push Drilling Rigs (Geoprobe Models 7822DT and 6600DT)
- Soil Remediation Oversight and Sampling

- Operation and Maintenance of Remediation Extraction Systems
- Field Operations and Management
- Groundwater Quality Monitoring
- Hazardous Waste Management and Disposal Profiling
- Phase I and II Report Preparation
- Database Management
- Litigation Support
- Computer Aided Drafting and Modeling Programs
- Aerial Photogrammetry, Stereoscopy, and 3D Visualization of Historical Aerial Photographs

## **Projects and Experience**

### ***Environmental Site Assessments***

- Mr. Dagdigian has assisted in site assessments throughout Southern California for a variety of clients. Each of these projects required visual assessment of the property utilizing aerial photographs and on-site reconnaissance, research of the potential environmental concerns at the property and adjacent properties, performing interviews with site contacts, and aiding in the completion of a report that summarized the potential for environmental impact to the property.

### ***Fieldwork Capabilities and Supervision***

- Mr. Dagdigian has supervised, assisted, and participated in a variety of field work activities involving contamination on multiple commercial properties and undeveloped parcels throughout Southern California. Field work activities have involved soil sampling for a host of contaminants including, but not limited to, volatile organic compounds, total petroleum hydrocarbons, metals, pesticides, and polychlorinated biphenyls. During each soil sampling activity, he was responsible for supervision of subcontractor operations, monitoring health and safety for all individual parties involved in the investigation, and characterizing and logging soils. Furthermore, Mr. Dagdigian is familiar with and capable of the operation of truck-mounted and limited access direct push drilling equipment. This experience gives him particular advantage in supervision of and direction of subcontractors utilizing direct push and hollow stem auger equipment.
- Mr. Dagdigian has performed oversight and been involved in activities regarding groundwater and vapor remediation and sampling. Activities included supervision of well development and collection of groundwater samples for monitoring reporting at multiple properties. Mr. Dagdigian has also completed soil vapor surveys for both volatile organic compounds and methane.
- Prior to soil and/or groundwater sampling, Mr. Dagdigian has prepared subcontracts, marked borings, obtained required permits, arranged for subsurface utility clearance, and coordinated with laboratories for pick-up and analysis of soil and/or groundwater samples.

- Mr. Dagdigian has assisted in the management of large-scale soil remediation projects for refineries, oilfields, and industrial properties. Remedial activities on these projects have included the oversight of multiple crews conducting excavation using excavators, scrapers, and large diameter auger equipment, and which included shoring installation and daily slurry backfilling. Mr. Dagdigian instructed excavation crews to separate and stockpile materials based on impact levels; sampled stockpiles under the supervision of county officials; directed the placement of backfill material; oversaw the soil screening process of highly impacted soils; took photos and drew sketches of continually changing site conditions; and maintained open channels of communication with clients, laboratory personnel and governing agencies.
- Mr. Dagdigian has been involved with carrying out the responsibilities under the permitting of the Air Quality Management District (AQMD) Rule 1166 for air monitoring of Volatile Organic Compounds at multiple large excavation sites in Southern California. With his ability to keep organized and detailed notes, he has been able to present all necessary field documentation to agency representatives that visit the field site. He has written and submitted status reports and the necessary permit amendments as project situations change.
- Mr. Dagdigian has performed oversight activities in association with groundwater sampling and groundwater remediation for both discrete and quarterly groundwater monitoring. Mr. Dagdigian has supervised single and multi-nested groundwater well installation and well development activities, directed the collection of grab groundwater samples using Hydropunch samplers, and overseen and collected groundwater samples for quarterly groundwater monitoring reporting at a variety of locations throughout Southern California, including using low-flow sampling techniques. Mr. Dagdigian has been involved with groundwater remediation strategies, including supervision of Membrane Interface Probe (MIP) studies and data interpretation, operation of ozone injection, pump and treat, and dual phase extraction remediation systems.

#### *Litigation Support*

- Mr. Dagdigian has worked on several expert witness testimony presentations for litigation cases nationwide. He was responsible for creating exhibits, database management and analysis, document management and review, historical aerial photographs investigations, aerial photogrammetry and stereoscopy, and report preparation.
- Mr. Dagdigian has been involved in the implementation of innovative aerial photography analysis techniques including aerial photogrammetry, stereoscopy, and 3D visualization of historical aerial photographs. His expertise in aerial photogrammetry allows a unique perspective and in-depth interpretation of historical aerial photographs that simply cannot be obtained by traditional methods of viewing top-down aerial photographs. His innovative analysis techniques have become a valuable tool in understanding historical site use and changes over time.

*Health and Safety*

- Mr. Dagdigian has prepared numerous Health and Safety Plans for various Phase II soil investigations and remediation projects
- Mr. Dagdigian has been the Health and Safety Supervisor on numerous job sites