## shawn crawley, E.I.T.

### Education

### B.S. - Civil Engineering, Old Dominion University, 2018

### Professional Licenses

### E.I.T. obtained December 2018

### Mr. Richardson has received technical training related to

### Drilling atop lined landfills

### Dangerous goods shipping

### Professional Experience and Education

Mr. Richardson has 3+ years of civil design and environmental project experience. His solid waste experience includes Municipal Solid Waste (MSW) and Construction and Demolition (C&D) landfill permitting, new cell design, closure (capping) design, construction oversight and certification, and groundwater and air permit compliance and reporting. His civil design experience has included site design/layout for landfill closures, waste transfer stations and residents’ waste drop-off facilities.

Applicable project experience include:

Landfill/Solid Waste

**Holland Industrial and C&D Landfill, Suffolk, VA**

Design and Construction Quality Assurance (CQA) on new C&D landfill waste disposal cell. Oversight during installation of 60-mil HDPE liner, structural fill and leachate collection system aggregate and piping. Minor permit modifications related to stormwater management and new cell construction including a diversion berm for segregating stormwater from leachate, stormwater calculations and design. Ongoing day-to-day operational assistance for C&D landfill. Semi-annual groundwater sampling and analysis of results.

**Campostella C&D Landfill, Norfolk, VA**

Semi-annual compliance groundwater monitoring, collected samples for laboratory analysis, and assisted in analyzing the resulting data for compliance. Oversaw testing of an in-situ air sparging system, including analysis of potential issues related to pressure deficiency and artesian conditions. Assisted in the preparation of a Corrective Action Site Evaluation (CASE) report. Provided CQA during a seep mitigation project including overseeing re-routing of a natural stream during construction.

**Buncombe County Landfill, Alexander, NC**

Prepared engineering plans and details for both C&D and MSW cell construction to provide additional capacity for Buncombe County, including site grading, stormwater retention and conveyance, reinforced rain tarp covered area, retention pond skimmer system, French drain system, E&S plans and details.

**Landfill No. 2, Virginia Beach, VA**

Semi-annual groundwater sampling and analysis of results. Quarterly landfill gas monitoring. Quarterly leachate compliance sampling. Prepared technical drawings and design of final cover system and temporary capping system. Stormwater analysis and design. Site planning and general civil design. Development of fill plan for new cell. Minor permit modifications for landfill gas monitoring system, final grading plan revisions, and stormwater modifications. Annual emissions calculations and associated reporting. Provided CQA during construction of a new leachate pump station. Provided yearly capacity evaluations. Ongoing day-to-day operational assistance for MSW landfill.

**Fauquier County Landfill, Warrenton, VA**

Provided technical specifications for final cover system construction project.

**City of Raleigh Solid Waste Division, Raleigh, NC**

Provided engineering analysis related to pre and post development stormwater calculations. Developed figures for new yard waste facility site plan.

**Bethel Landfill, Hampton, VA**

Engineering design drawings, stormwater and uplift calculations related to temporary capping system.

**Honey-Go-Run Reclamation Landfill, Baltimore County, MD.** Provided construction quality observation for the installation and remediation of a landfill gas collection system.

**Shenandoah County Landfill, Edinburg, VA.** Prepared a Landfill Impact Statement (LIS) related to a phase 2 expansion. Coordinated with various government organizations related to LIS report. Coordinated with sub-consultants for a wetland delineation and approval from the Army Corps of Engineers.

**Mount Trashmore, Virginia Beach, VA.** Analyzed and sampled seeps and sinkholes along the side of the closed landfill. Prepared report summarizing recommendations for the treatment of the seeps and sinkholes as well as the chemicals of concern found in the samples.

Environmental

**Former American Cigar Factory, Norfolk, VA**

Conducted Phase II Environmental Site Assessment. Soil/groundwater field sample collection relating to site remediation of site in Norfolk, VA. Prepared technical drawings, maps and documents. Oversaw removal of asbestos insulated oil transmission lines and related site remediation.

**Blue Knight Groundwater Well Monitoring, Newport News, VA**

Conducted monthly groundwater monitoring and assisted in annual groundwater characterization report. **Hilltop Walgreens, Virginia Beach, Sub Slab Vapor Mitigation System Inspection.** Conducted semi-annual inspection of SSVM.

**Victory West Thrill Park, Voluntary Remediation Program.** Provided construction oversight and recommendations related to the removal of retired automobile hydraulic lifts and construction oversight for the installation of four groundwater wells related to potential contamination. Completed groundwater and soil sampling related to VRP compliance, and prepared as-built drawings and designed temporary safety covering for minimizing risk related to hydraulic lifts.

**Lawson, Weblin Square Baker Road, Virginia Beach, VA**

Conducted engineering field work relating to soil-gas sampling. The project was performed under the requirements of the Virginia Voluntary Remediation Program.

General Civil

**Horner Antennae Site Development, Chesterfield, VA.** Responded to various comments from county environmental engineering officials related to the installation of communication towers in Chesterfield, VA.

**Dewatering and Sediment Removal, Cumberland County, NC.** Provided general erosion and sediment control recommendations and drawings for the dewatering and sediment removal of a flooded borrow pit. Provided cost estimates for both the dewatering and sediment removal using RSmeans.