#### **ALEJANDRA RUIZ**

#### Education

B.S. - Environmental Engineering, Colorado School of Mines, 2016

## Registrations

40-hour CFR §1910.120 Health and Safety Land Science Geo-Seal Certified Inspector Nuclear Gauge Training



## Professional Experience

Ms. Ruiz is experienced in landfill engineering, environmental engineering, civil engineering, and regulatory compliance projects. She conducts landfill gas system design, construction quality assurance (CQA) and quality control, and environmental compliance projects. Following are representative of her project experience:

### **Environmental Studies Projects**

**Fern Isle, Southside, Curtis Park, Virginia Keys – City of Miami.** Assist with scheduling groundwater events for each site. Acquire groundwater data and results in order to write quarterly or semiannual report for the different sites. These reports are submitted to DERM for further evaluation requirements at the sites.

Kendall Family Assemblage, Mountain Cove, Westview North, Pine Isle, Caple North, Caple South, Siena North – Lennar. Has written various types of reports for various sites such as Soil Management Operating Reports (SMORs), Soil Management Implementation Reports (SMIRs), Engineering Control Implementation Reports (ECIR), and Response to Comments (RTCs). The reports are specific to soil management tracking and each site have different reporting requirements in accordance with Division of Environmental Resources Management (DERM). These reports are submitted and are approved by DERM.

Soil Management Implementation Report (SMIR)/ Engineering Control Implementation Report (ECIR) – Hileah Garden Trade Center. Prepared the SMIR and ECIR for a commercial site, the reports included figures, tables, tickets, and surveys. These reports were submitted for approval to DERM.

#### Other Experience

**Quarterly Liquid level & GCCS Data Review – GFL Arbor Hills Landfill.** Acquired liquid level data of vertical wells in order to analyze which wells were performing well or not. Identified issues in wells that lacked in performance. The quarterly report suggests actions to be taken for those specific wells. This report is in accordance to the Consent Judgement required by the Landfill.

**Groundwater Figures – Evergy.** Acquired monitoring well data to incorporate into the groundwater figures using CAD for quarterly reports for various sites for Evergy.

**Quarterly Operations, Maintenance, and Monitoring Reporting – Rodgers Oil.** Acquired monitoring well data and incorporate data into quarterly report. The quarterly report consists of tables and figures regarding the current and historical data of the monitoring wells.

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**Remedial Gas Plans – Wagenbrenner Development.** Assisted with design for vapor mitigation plans for various projects using CAD.

**Kuhlman Diecasting – KDHE.** Assisted with oversight activities at the Site. Documented and photographed the excavation of soil/sediment and construction debris. Tracked the debris as special waste as it was hauled to Johnson County Landfill.

**Stormwater Prevention Plan (SWPP) – Meridian.** Assisted with preparing SWPP, writing the report and developing figures using CAD.

Monthly GCCS Data Review – Republic Services (Charlotte Motor Speedway, Upstate, Uwharrie Landfills). Acquire monthly GCCS data and incorporate data into a monthly data package report; the monthly data packages are sent to the client by the end of the first week of each month. The monthly data package highlights compliance issues with wells and the flare that occurred during the month. I have participated in monthly gas meetings which are held in order to address the issues and provide solutions to the clients.

Semi-annual NSPS and Title V Reports (Charlotte Motor Speedway, Upstate, Uwharrie Landfills). Acquire GCCS data and incorporate data into the semi-annual NSPS and Title V Compliance Report. The semi-annual report highlights all issues within those 6-months, in regards to the wells and the flare. The semi-annual reports any GCCS exceedance or deviations from the NSPS regulations or site's Title V Air Permit.

#### Landfill Gas Design and CQA Projects

Reno County Landfill, Hutchinson, KS. Assisted with CAD design for 2021 landfill gas collection and control expansion project. The design included large header pipe, forcemain pipe, airline pipe, and extractions wells.

Waste Connections, Loess Hills Landfill, Malvern, IA. Assisted with CQA duties during the 2020 landfill gas collection and control expansion project. This project included new LFG extraction wells, LFG pipe, and a flare. Duties in the field included documenting well and pipe installation and maintaining a photographic record of work done, while duties subsequent to field work included preparing the daily field logs.

Republic Services, Conestoga Landfill, Morgantown, PA. Performed CQA duties during the 2020 landfill gas collection and control expansion project. This project included 38 new LFG extraction wells and LFG piping. I was in charge of over-watching drilling operations. Duties in the field included documenting well and pipe installation and maintaining a photographic record of work done, while duties subsequent to field work included preparing the daily field logs.

Waste Management, Construction & Demolition - Keegan Landfill, Kearny, NJ. Assisted with CQA duties during the 2019 & 2020 landfill gas collection and control expansion project. This project included 28 new LFG extraction wells, LFG pipe, and temporary blower/flare. This project focused on odor and H2S activity on the landfill. Duties in the field included documenting well and pipe installation and maintaining a photographic record of work done, while duties subsequent to field work included preparing the daily field logs. Assisted with preparation of construction documentation report and as-built construction drawings for client.

Republic Services, Construction & Demolition – Pine Avenue Landfill, Niagara Falls, NY. Assisted with CQA duties during the 2019 landfill gas collection and control expansion project. This project included LFG pipe. Duties in the field included documenting pipe installation and maintaining a

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photographic record of work done, while duties subsequent to field work included preparing the daily field logs. Assisted with preparation of construction documentation report for client.

Chester County Solid Waste Authority, Landfill - Lanchester Landfill, Narvon, PA. Assisted with CQA duties during the 2019 landfill gas collection and control expansion project. This project included 14 new LFG extraction wells. Duties in the field included documenting well drilling and maintaining a photographic record of work done, while duties subsequent to field work included preparing the daily field logs.

**Cumberland County Landfill, Fayetteville, NC**. Assisted with CAD design of scale-house and other new buildings that will be built at Cumberland County Landfill.

Berkeley County Landfill, Moncks Corner, SC. Assisted with landfill gas design for H2S activity at landfill. This project included 18 new odor control wells and pipe installation.

Republic Services, Upstate Landfill, Enoree, SC. Assisted with CQA duties during the 2019 landfill gas collection and control expansion project. This project included 9 new/replacement LFG extraction wells, LFG, air, and force main piping. Duties in the field included documenting well and pipe installation and maintaining a photographic record of work done, while duties subsequent to field work included preparing the daily field logs and boring logs. Assisted with preparation of construction documentation report and as-built construction drawings for client.

New Hanover County Landfill, Wilmington, NC. Performed CQA duties during the Winter 2019 landfill gas collection and control expansion project. The project included piping and five condensate sumps. Duties in the field included documenting sumps and pipe installation and maintaining a photographic record of work done, while duties subsequent to field work included preparing the documentation reports, daily field logs and assisting with the preparation of the as-built construction drawings.

Berkeley County Landfill, Moncks Corner, SC. Assisted with CQA duties during the Fall 2018 landfill gas collection and control expansion project. This project included nine new LFG extraction wells and pipe installation. Photographic record and documentation was reported in the daily field logs, boring logs, and assisting with the preparation of the as-built construction drawings.

Republic Services, Northeast Landfill, Eastover, SC. Performed CQA duties during the Winter 2018 landfill gas collection and control expansion project. This project included 7 new LFG extraction wells, piping, and two condensate sumps. Duties in the field included documenting well and pipe installation and maintaining a photographic record of work done, while duties subsequent to field work included preparing the documentation reports, daily field logs, and boring logs.

Republic Services, Upstate Landfill, Enoree, SC. Assisted with CQA duties during the 2018 landfill gas collection and control expansion project. This project included 23 new/replacement LFG extraction wells, LFG, air, and force main piping, one condensate sumps, and pump station. Duties in the field included documenting well and pipe installation and maintaining a photographic record of work done, while duties subsequent to field work included preparing the daily field logs and boring logs.

Republic, Lee County Landfill, Bishopville, SC. Performed CQA duties during the construction of landfill gas collection and control system (GCCS) expansion in 2018. This project included 23 new and re-drilled LFG extraction wells, associated piping and fittings. Duties in the field included documenting daily construction progress for installation of landfill gas wells, associated piping and fittings and maintaining a photographic record of work completed. Duties subsequent to field work

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included preparing the construction certification report, daily field logs, boring logs, and assisting with the preparation of the as-built construction drawings.

**Cumberland County, Ann Street Landfill, Fayetteville, NC**. Assisted with taking liquid level measurements in LFG wells and writing the technical memorandum.

Waste Connections, Anson County Landfill, Polkton, NC. Performed 3rd party construction quality assurance, on behalf of Anson County, NC, during a new cell construction in 2018. Duties in the field included documenting construction progress for placement of structural soil, clay soil liner, HDPE liner, geotextile drainage liner, protective cover soil, and leachate piping. Photographic record of performed work was maintained throughout the course of the project. Assisted with the preparation of the construction certification report which included daily field logs, construction photographs, and laboratory analysis results.

#### **Environmental Compliance Projects**

Omaha Public Power, Non-emergency spill response, Elkhorn, NE. Assisted with removing any oil spills around transformers, and cleaning the transformers with the appropriate equipment to slow down any oil spills until OPP comes to replace the transformer.

**UNC Charlotte Waste Characterization Study, Charlotte, NC**. Assisted with gathering and sorting waste for the crew members, then they separate the waste in order to identify and calculate recyclable vs. waste.

City of Rock Hill, University Center Sports Arena, Rock Hill, SC. Performed vapor barrier testing for hallway floors in championship court. Documented concrete pours in hallway floors once vapor barrier testing was completed.

**Anson County Closed Landfill, Polktown, NC**. Assisted with groundwater sampling of the closed landfill.

City of Rock Hill, University Center Brownfield Site, Rock Hill, SC. Performed environmental sampling in accordance with EPA Brownfield guideline during a demolition/redevelopment project in Rock Hill, SC. Groundwater, concrete, and soil samples were obtained and shipped to laboratory.

**A-1 Sandrock, Inc., Construction and Demolition Landfill, Greensboro, NC**. Assisted with the documentation of semi-annual groundwater and surface water samples to comply with federal and state guidelines.