

ERIN A. QUINN

Education

BS – Chemistry, University of California, Santa Cruz, 2003

Specialty Certifications

Accredited Lead Verifier under CARB for General Stationary Combustion (GSC) Emissions (H-21-109)

Accredited Lead Offset Verifier under CARB for Livestock (H2-19-133)

Accredited Lead LCFS Verifier under CARB for Alternative Fuel Transactions (H3-20-113)

Accredited Lead Verifier under the ODEQ Clean Fuels and Mandatory Reporting Program

Professional Experience

Mr. Quinn has nearly two decades of experience in environmental consulting, specializing in air quality, environmental assessments, and greenhouse gas (GHG) consulting, reporting, and verification. He has participated in hundreds of GHG verification projects throughout the United States, specializes in air permitting and reporting in California and the Southwest, and has completed GHG verification training in California, Oregon, and Washington.

Mr. Quinn has completed criteria pollutant, air toxic, and GHG emissions estimates and inventories, and has prepared numerous permit-to-construct/operate permit applications. He prepares compliance reports, which includes reviewing and maintaining records and regulatory deadlines. He has also completed evaluations and reporting for federal GHG rule and various state GHG rules.

Greenhouse Gas

Mr. Quinn has created GHG emission inventories, emission reduction plans, evaluated GHG emissions, conducted site visits, and assessed GHG emissions reporting programs. He checks and verifies the accuracy of calculations and prepares and submits verification statements regarding GHG emissions. Project experience is listed below:

CARB, Lead Verifier

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| • 3 Phases Renewables ¹ | • Dynegy | • ProEnergy Unit 2 |
| • Aemetis | • FortiStar WC | • RCEA |
| • Altamont | • Genentech | • Redding EU – EPE ¹ |
| • Ampersand | • Houweling Tomatoes | • Rio Bravo Fresno |
| • Anheuser Busch FF | • Humboldt Redwood | • Rio Bravo Rocklin |
| • Anheuser Busch LA | • IHI Chinese Station | • Roseburg Forest Products |
| • Avangrid Renewables ¹ | • Ingredion | • Roseville Electric – EPE ¹ |
| • Shell Energy NA ¹ | • Inland Energy | • Roseville, Energy Park |
| • Bolthouse Farms | • Kiefer Landfill | • Schlosser Forge |
| • BPA – ACS ¹ | • LAX | • SEI Fuel Services, Inc. ¹ |
| • BPA – EPE ¹ | • Leprino Foods | • Sempra Generation ¹ |
| • Brea Power | • Loma Linda | • Solana Energy Alliance ¹ |

- Buena Vista Biomass
- CA DWR¹
- Calgren Renewable
- California Paperboard
- California Power
- Campbell Soup
- Citigroup¹
- City of Palo Alto
- City of Redding
- Collins Pines Company
- Coso BLM E&W³
- Coso Navy I³
- Coso Navy II³
- LACDS
- DG Fairhaven Power
- Los Angeles ISD Civic
- LAISD Patchness
- Marin Clean Energy¹
- Merced Power
- Prima Deshecha Energy
- MM San Diego, LLC
- MM West Covina, LLC
- Musket¹
- Newark Pacific
- Olam-Firebaugh
- Olam-Gilroy
- Olam-Lemoore
- Otay Landfill
- Procter & Gamble
- ProEnergy Unit 1
- Solar Turbines
- Southwest Gas³
- SPI Anderson
- SPI Burney
- SPI Lincoln
- SPI Quincy
- SPI Shasta Lake
- SPI Sonora
- Sycamore Energy, LLC¹
- Targa
- The Energy Authority¹
- Tomatek/Neil Jones
- Truckee Donner PUD¹
- USS-POSCO
- Valley Electric Asso¹

¹ Verification includes electrical/fuel transactions.

² Verification included process emissions (landfill, wastewater treatment, geothermal, or other process emissions).

³ Verification includes oil and gas emissions.

CARB, Lead Offset Verifier. Mr. Quinn performed State of California cap on GHG emissions and market-based compliance mechanisms offset verification for livestock projects:

- Green Valley Dairy
- Brook View Dairy
- Pagel's Ponderosa Dairy
- Sunny Knoll Dairy
- Vanderhyde Dairy
- British Petroleum (two dairy projects)
- Scenic View Dairy
- Homestead Dairy
- Fair Oaks Dairy

BioRam High Hazard Fuel Verifications

- Rio Bravo Fresno (Southern California Edison)
- Rio Bravo Rocklin (Southern California Edison)
- Chinese Station (Southern California Edison)
- Wheelabrator (PG&E)
- Burney Forest Products (PG&E)
- Honey Lake Energy (SDG&E)

CARB, Low Carbon Fuel Standard Lead Verifier. Mr. Quinn completed State of California low carbon fuel standard verification for the following projects:

- ACT, Inc.
- BP West Coast Company
- Phillips 66

- Kern Oil Refinery Company
- Archer Danial Midland
- Los Angeles County Sanitation District

ODEQ, Clean Fuel Program and Mandatory Report Lead Verifier. Mr. Quinn completed State of Oregon clean fuel and mandatory report verification for the following projects:

- BB Energy USA, LLC
- BP West Coast Company
- Phillips 66
- Cascade Pacific Pulp
- Emerald People's Utility District

CARB Cap and Trade Consulting and Verification. Verification for livestock projects under CAR and CARB Cap and Trade Program. Assisting clients in finding CARB offset credits to purchase, or finding alternative ways to lower a facilities emission, Mr. Quinn has helped companies navigate the Cap and Trade Program.

Specialized GHG Inventory Calculations. Completion of multi-year specialized GHG inventory calculations for multiple clients, including specialized facilities such as wastewater treatment for facilities, commercial, and industrial emissions (carbon dioxide, nitrous oxide, and methane).

In addition to the aforementioned projects and experience, Mr. Quinn has worked on over 400 other GHG verifications under CARBs mandatory GHG reporting program and the California Climate Action Reserves protocol.

Air Permitting and Reporting

Annual Emissions Inventory Reporting. Annual emission reporting for numerous industrial facilities in California. These projects include calculating the annual emissions from criteria pollutants, hazardous air pollutants, volatile organic compounds, and site-specific air pollutants.

Air Quality and GHG Compliance Audits. Services provided for wastewater treatment plants, landfill sites, and other industrial operations.

Preparation of Permit-to-Construct/Operate Permit Applications for Emergency Generators. Permitting projects include multiple emergency engines for Quinn Company in the South Coast Air Quality Management District (SCAQMD).

Air Quality and GHG Analysis for Crystal Geyser, Mount Shasta. Analyzing project impact of the Crystal Geyser, Mount Shasta facility for CEQA document. This analysis process was part of a water bottling process and will included air quality, GHG, noise, and traffic impact analyses.

Title V and Non-Title V Permit Services. Preparation of Title V and Non-Title V permit and permit renewal applications and documentation for landfill sites. Mr. Quinn has prepared permit applications and associated services for multiple clients in California and Tribal and/or EPA regions.

Toxic Release Inventory (TRI) Reporting and Services. Preparation of TRI inventories and reporting for chemical manufacturing facilities. Mr. Quinn has conducted screening and inventory reviews, and has prepared and reported inventories for multiple clients in United States.

Semi-Annual Compliance Reporting. Project includes semi-annual compliance reporting and annual non-methane organic compound (NMOC) emission rate reporting for multiple landfill clients,

LCFS Verification and Validation

Mr. Quinn has worked on LCFS related projects, which include providing validation services, calculating baseline emissions, looking at potential credit generation opportunities, and analyzing data sets from clients like Baker Commodities.

CEQA and NEPA Analyses

Mr. Quinn provides technical support for NEPA and CEQA environmental documents, federal and local permitting actions, environmental compliance, and project management. Mr. Quinn provides technical expertise in air quality, climate change, noise, and traffic. The following list represents the projects to which Mr. Quinn provided technical support, expertise, and/or permitting:

Planning and Development Projects

- Vanden Meadows Residential Development, Fairfield, CA. Air quality, climate change, noise and traffic analysis for the preparation of an EIR for the Vanden Meadows Specific Plan and Development Project, located in Vacaville. Mr. Quinn performed air quality modeling, determined project-related air quality and noise impacts, developed air quality and noise mitigation plans. Mr. Quinn interpreted the Traffic Impact Analysis and completed the traffic impact section of the EIR. Mr. Quinn modeled direct and indirect project-related criteria pollutants GHG emissions, determined project-related impacts, developed emissions reduction plans.
- Lake Natomas Waterfront and Trail Access Enhancement Project NEPA/CEQA Compliance, City of Folsom Parks and Recreation Department, Sacramento County, CA. Air quality, climate change, noise, public utilities, and traffic analysis for an IS/EA. Mr. Quinn acted as the deputy project manager, performed air quality modeling, determined project-related air quality and noise impacts, developed air quality and noise mitigation plans. Mr. Quinn interpreted the Traffic Impact Analysis and completed the traffic impact section of the EIR. Mr. Quinn modeled direct and indirect project related GHG emissions, determined project impacts, developed a GHG emissions reduction plan.
- San Benito River Greenway Trail IS/MND, City of Hollister, San Benito County, CA. Air quality, climate change, noise, and traffic analysis for a Mitigated Negative Declaration for the City of Hollister. Mr. Quinn performed air quality modeling, determined project-related air quality and noise impacts, developed air quality and noise mitigation plans. Mr. Quinn modeled direct and indirect project related GHG emissions, determined project impacts, developed a GHG emissions reduction plan.
- Fulcrum Mixed-use Infill Development, West Sacramento, CA. Air quality, climate change, noise, traffic, and health risk assessment for a Program EIR to analyze amendments to the City of West Sacramento's Triangle Specific Plan. Mr. Quinn performed air quality modeling, determined project-related air quality and noise impacts, developed air quality and noise mitigation plans. Mr. Quinn interpreted the Traffic Impact Analysis and completed the traffic impact section of the EIR. Mr. Quinn modeled direct and indirect project related GHG emissions, determined project impacts, and developed a GHG emissions reduction plan. Mr. Quinn conducted a health risk assessment using the Sacramento Municipal Air Quality Management District's Major Roadway Protocols.

- Peach Road Project. Air quality and GHG analysis for a zoning change. Potential impacts associated with the development of an 8.2-acre general light industry project. Mr. Quinn performed air quality and GHG modeling and air quality and GHG analysis.

Infrastructure Projects

- Placer County SMD EIR, Placer County, CA. Air quality, noise, and traffic analysis for the preparation of a CEQA compliance document analyzing impacts resulting from the proposed decommissioning of the wastewater treatment plant and construction of forced main sewer. Environmental issues included noise, odor, and traffic. Mr. Quinn performed air quality modeling, performed noise monitoring, determined project-related air quality and noise impacts, developed air quality and noise mitigation plans. Mr. Quinn interpreted the Traffic Impact Analysis and completed the traffic impact section of the EIR.
- Easterly Wastewater Treatment Plant Expansion EIR, Elmira, CA. Air quality, noise, traffic, and assisted with wastewater analysis for the preparation of an EIR. Mr. Quinn performed air quality modeling, performed noise monitoring, determined project-related air quality and noise impacts, developed air quality and noise mitigation plans. Mr. Quinn interpreted the traffic impact analysis and completed the traffic impact section of the EIR.
- Russian River Irrigation Reliability and Beneficial Reuse Project EIR, Guerneville CA. Mr. Quinn performed air quality modeling, determined project-related air quality and noise impacts, developed air quality and noise mitigation plans. Mr. Quinn interpreted the Traffic Impact Analysis and completed the traffic impact section of the EIR.
- Hollister Reclaimed Water Irrigation Project EIR, Hollister, CA. Air quality and noise analysis for preparation of a Subsequent EIR to tier off an EIR prepared in 2006 for the Domestic Wastewater Improvements and Recycled Water Facility Project. Prepared and submitted an Authority to Construct and Permit to Operate application to the Monterey Bay Unified Air Pollution Control District for the project.
- Hollister Municipal Airport Reclaimed Water Irrigation Project, Hollister, CA. Prepared air quality and noise analysis, including mitigation plans for preparation of NEPA Categorical Exclusion.
- Ancil Hoffman Groundwater Extraction and Treatment Project MND, Rancho Cordova, CA. Air quality, traffic, and noise analysis for preparation of a Mitigated Negative Declaration for project involving conversion of monitoring well to extraction wells and development of treatment facilities.
- Lemon Street Channel Flood Reduction and Habitat Enhancement MND, Vallejo, CA. Air quality, noise, and assisted with water quality analysis for a Mitigated Negative Declaration. The project involved reconfiguration of storm drain system in a Vallejo urban area.
- Pescadero Community Sewer Project MND, Pescadero, CA. Prepared air quality, noise, and climate change analyses for preparation of a Mitigated Negative Declaration for a project involving the replacement of septic systems with centralized treatment facility.

Tribal Projects

- Quechan Tribal Title V Permit. Prepared a 40 CFR Part 71 U.S. Environmental Protection Agency Title V permit application for the Quechan Tribe. Completed the application included an Authority to Construct and Permit to Operate, a Best Available Control Technology and Lowest Achievable Emissions Rate Analysis, U.S. Environmental Protection Agency Title V application forms, and actual and potential to emit calculations for three internal combustion diesel-fired engine/generators.
- Table Mountain Reservation Fee-to-Trust. Air quality, climate change, noise, and assisted with water quality analysis for the preparation of Application and Environmental Overviews (EO) to support Categorical Exclusions on three fee-to-trust applications. Bureau of Indian Affairs, Pacific Region, served as Lead Agency. Key environmental issues included biological and cultural resources.
- Table Mountain Reservation Environmental Services. Air quality and assisted with water quality analysis for providing a full range of ongoing environmental management services. Services have included review of existing documentation, development of an environmental resources inventory and needs assessment, and preparation of management protocols.
- Thunder Valley Casino Tribal EIR. Air quality, noise, and traffic analysis in support of a Tribal Environmental Impact Report for the Thunder Valley Casino expansion project located in the Sunset Industrial Area of western Placer County. Developed mitigation measures to reduce emissions of regional criteria air pollutants, as well as emissions of greenhouse gases linked to global climate change, Assessing the potential for declining operational capacity at area intersections and state highway segments due to increased traffic.
- Cache Creek Destination Resort Title V permit and Tribal EIR. Prepared and submitted a Title V permit exemption under 40 CFR Part 71. Air quality, noise, and traffic analysis for a NEPA compliance document prepared for a federal casino expansion project within the City of Brooks, California. Bureau of Indian Affairs, West Regions, served as Lead Agency.

Landfill Projects

- American Avenue Landfill, Air Permitting Action, County of Fresno, CA. Completed permit modification for landfill gas flare, San Joaquin Air Pollution Control District.
- Geer Road Landfill, Stanislaus County, Title V Permit Renewal, County of Stanislaus, CA. Prepared and submitted Title V renewal for Geer Road Landfill, San Joaquin Air Pollution Control District.
- Geer Road Landfill, Notice of Violation, Stanislaus County, CA. Consultation with San Joaquin Air Pollution Control District to resolve notice of violation issues.
- City of Paso Robles Landfill, landfill expansion, EIR, Paso Robles, CA. Air quality analysis for preparation of a subsequent EIR landfill expansion. The City of Paso Robles served as Lead Agency. Key environmental issues included air and water quality.
- Ameresco, Chiquita Canyon Landfill Air Permitting Action, Castaic, CA. – Completed permit application and best available control technology analysis of a landfill gas to

energy project in the South Coast Air Management District for Ameresco Chiquita Energy, Inc. Project consisted of two landfill gas turbines with emissions control devices.

- Cummings Road Landfill, Eureka Garbage Company- Nor-Cal Waste, Inc., Permit Action, Eureka, CA. – Completed permitting of additional extraction wells to assist in the closure of the landfill. The application was submitted to the North Coast Unified Air Quality Management District (NCUAQMD). Responsibilities included: reviewing Title V permit and discuss permit Conditions with the NCUAQMD, consult with NCUAQMD to expedite application in light of permit conditions, prepared application, calculated emissions inventory for landfill and control system, and reviewed Title V permit for consistence with Federal Rules and Regulations.
- Compliance Documents, California and Utah Landfills – Prepared Title V compliance reports for numerous landfills throughout California and Utah. Responsibilities included: research, data analysis, emissions calculation, confirmation of data with client and field services, and prepared document.

Vineyard Projects

- Suscol Mountain Vineyards Erosion Control Plan EIR, Napa County, CA. Air quality, traffic, and noise analysis for preparation of an EIR for the Suscol Mountain Vineyards Erosion Control Plan Application. The project is located in southeastern Napa County, California.
- Jasud Estate Vineyards Timberland Conversion Project EIR, Napa County, CA. Air quality, climate change, traffic, and noise analysis for preparation of an EIR for the Jasud Estate Vineyards Timberland Conversion Project, which includes the harvest of timberland and conversion to vineyard on a 38± acre property in Napa County, CA.
- Circle S Ranch Vineyard, Napa County, CA. Air quality, climate change, traffic, and noise analysis for preparation of an EIR for the Circle S Ranch Erosion Control Plan Application project, located in Napa County, within a County-designated Sensitive Domestic Water Supply Drainage. The project proposes the development of 337 net acres of vineyard within 411 gross acres disturbed on the 1,593-acre Circle S Ranch.
- Walt Ranch Erosion Control Plan EIR, Napa County, CA. Air quality, climate change, traffic, and noise analyses for preparation of an EIR Walt Ranch Erosion Control Plan Application project located in south-central Napa County, California. The project proposes earthmoving activities on slopes greater than five percent in connection with the development of 397 net acres of vineyard within 538 gross acres disturbed on the approximately 2,300-acre Walt Ranch.

Transportation

- Millerton Road MND/EA, Friant, CA. Noise, air, noise, and traffic analysis in support of a NEPA/CEQA environmental document. The project involved roadway widening of a rural road from two to four lanes along 7.2-mile segment of Millerton Road in Fresno County.
- Del Paso/I-80 Interchange Signalization Categorical Exclusion, City of Sacramento, CA. Noise, air, noise, and traffic analysis in support a combined Mitigated Negative Declaration/Environmental Assessment. would be needed to meet CEQA and NEPA requirements.