



CLERK OF THE BOARD DIVISION
OF THE BOARD OF SUPERVISORS' OFFICE

COUNTY OF HUMBOLDT

825 FIFTH STREET
EUREKA, CALIF. 95501-1153

PHONE (707) 476-2384; 445-7299 (FAX)

APPLICATION TO SERVE ON THE HUMBOLDT COUNTY

RESOURCE CONSERVATION DISTRICT

APPLICANT NAME: Christine S. Manhart

MAILING ADDRESS: [REDACTED], Eureka, CA 95501

TELEPHONE: Home: [REDACTED] Work: [REDACTED] Fax: [REDACTED]

E-MAIL ADDRESS: manhartc@lacoassociates.com

OCCUPATION: Principal Geologist

PERSONAL REFERENCES:

(1) Christopher Watt PHONE: [REDACTED]

(2) Michael Nelson PHONE: [REDACTED]

PRIOR ADVISORY BOARD OR BOARD OF DIRECTORS EXPERIENCE? N NO YES

PLEASE WRITE A BRIEF STATEMENT DESCRIBING WHY YOU'RE INTERESTED IN SERVING ON THE **RESOURCE CONSERVATION DISTRICT**.

I have been attending HCRCD meetings for the last several months in order to broaden my understanding of issues that impact Humboldt County. It dovetails with my work for the last two years as an advisor and a committee member of the North Coast Regional Land Trust. I feel that working with community groups whose mission includes preservation of working lands and other natural resources aligns with my working interest and background in hydrogeology. I am a California Certified Hydrogeologist and have both the education and working experience to provide perspective to the Board on relevant topics.

PLEASE ATTACH A CURRENT RESUME.

DATE: 1/6/2020 SIGNATURE: 

SUBMIT THIS APPLICATION TO:
HUMBOLDT COUNTY RESOURCE CONSERVATION DISTRICT, Clerk of the Board, 825 Fifth Street, Suite 111,
Eureka, CA 95501-1153.

DATE TO SUPERVISOR _____ DATE APPROVED _____ NOT APPROVED _____

Christine S Manhart, PG, CHG

Principal Geologist



Areas of Expertise

Hydrogeology

- Remediation Design
- Phase I/II Environmental Site Assessment

Education

- Bachelor of Science, Oceanography
Humboldt State University, Arcata
California
- Bachelor of Arts, Geology
Humboldt State University, Arcata
California
- Master of Science Studies, Environmental
Systems, Geology, Humboldt State
University, Arcata, California

Licensure and Certifications

- Professional Geologist – California Board for
Professional Engineers, Land Surveyors, and
Geologists (California License No. 7576)
- Certified Hydrogeologist BPELSC
- Qualified SWPPP Developer/Practitioner
QSD/QSP
- Qualified Industrial Stormwater Practitioner
QISP

Publications

Valentine, David W., Edward A. Keller, G. Carver, Wen-Hao Li, Christine Manhart, Alexander R Simms. 2012. "Paleoseismicity of the southern end of the Cascadia Subduction Zone, Northwestern California." In Bulletin of the Seismological Society of America, vol 102(3).

Manhart, C., Chaney R., Slonim, S., Watt, C. 2010. "Verification of site cleanup using a dual equilibrium desorption model." In Contaminated Sediments: Sustainable Management and Remediation. Galvez, Rosa and Dyer, Mark (eds.). ASTM International.

Manhart, Christine S. and Ronald C. Chaney. 2006. "Modeling TPH desorption in unconsolidated dune sand during remediation using dual-equilibrium desorption (DED) model." In Contaminated Sediments Evaluation and Remediation Techniques. M. Fukue, K. Kita, M. Ohtsubo, and R. Chaney (eds.). ASTM International. Presented in Shizuoka, Japan on May 25, 2006.

PROFESSIONAL EXPERIENCE

Ms. Manhart has over 10 years' experience in environmental and hydrogeology, ranging from investigating and remediating contaminated properties, evaluating water supply sources, performing environmental due diligence, and helping clients remain in compliance with environmental regulations. As leader of the Eureka Geo/Environmental team and as Principal Geologist, she is charged with overseeing individual and team development and risk management for geology projects company wide.

Ms. Manhart has extensive experience in contaminated site investigation and remediation and has investigated, monitored, and remediated numerous impacted properties with a variety of constituents of concern that resulted from property uses ranging from underground storage tank sites to municipal landfills and industrial facilities. She is also experienced in presentation of results to stakeholders and through professional presentations.

She has also worked with property owners in navigating California's complex water rights laws, conducting evaluations of yield and connectivity for surface and groundwater sources in order to provide landowners with the required studies necessary to obtain water diversions and/or approval of on-site water use. She is also working with communities and public water systems to aid in their compliance with California's Sustainable Groundwater Management Act by analyzing current and anticipated future water needs and evaluating whether those need can sustainably be met.

Ms. Manhart's extensive experience preparing Phase I/Phase II Environmental Site Assessments (ESAs) and Stormwater Pollution Prevention Plans (SWPPPs) has positioned her as a leading authority for large industrial/manufacturing facilities application. She's conducted and directed assessments in a variety of industries, including large-scale textile milling, furniture manufacturing, chemical processing, and tire remanufacturing, and for small commercial properties such as gas stations, print shops, and lumber facilities.

SELECT PROJECT EXPERIENCE

Roger's Garage Remediation Alternatives Project – Arcata, CA.

Performed an intensive analysis of the distribution of heavy metals in site soils using XRF analysis and provided analysis of remediation alternatives, negotiation of cleanup levels with NCRWQCB, and design for the option selected. Stakeholder involvement included public meetings with regulators and neighborhood groups.

Crescent City Shell Innovative Remediation Design and Implementation – Crescent City, CA. Innovative remediation

Christine S Manhart, PG, CHG

Principal Geologist

design/implementation, including the first in-situ chemical oxidation system to use ozone sparging in California Regional Water Quality Control Board's Region 1. This project was also the first in the region to enter the states Pay for Performance program.

Humboldt Petroleum, Inc. Fortuna Bulk Plant – Fortuna, CA. Designed an over-excavation at a former bulk fuel distribution facility that incorporated a mobile field laboratory to determine when the extent of COC above the negotiated cleanup goals had been attained.

California Department of Forestry (now CalFire) - various locations, CA. Managed two-year, \$200,000 contract for environmental monitoring and investigation at multiple locations.

Private client, Stormwater Pollution Prevention Plan – Pearisburg, VA. Prepared an industrial SWPPP for a manufacturer of cigarette filters at an approximately 200 acre parcel adjacent to a river that included chemical processing, a coal fire plant with on-site railroad delivery of coal, and an on-site wastewater treatment facility that included treatment tanks and settling ponds before eventual discharge into the New River. Worked with engineers to identify, evaluate, and propose modifications where necessary of existing BMPs.

Humboldt Petroleum, Inc. – Various locations, CA. Managed consent decree-compliance for 15 active gas station and bulk fuel plant projects undergoing various stages of investigation/remediation/monitoring with a court-ordered compliance schedule.

Private Client, Phase I/Phase II Environmental Site Assessments – South Boston, VA. Identified numerous areas with potential environmental impacts in a Phase I ESA performed at a furniture mill that was closing prior to sale of the property. Impacts included releases of resins, paints, and other finishes as well as oils and lubricants used in maintaining machinery.

Private Client, Phase I/Phase II Environmental Site Assessments - Radford, VA. Identified numerous areas with potential environmental impacts in a Phase I ESA performed at a textile mill that was closing prior to sale of the property. Investigation included installation of borings with soil and groundwater sampling for primarily VOCs and petroleum products used in processing and equipment maintenance. Included confined space investigation of cooling tunnels under the fiber processing building.

Private Client, Phase I/Phase II Environmental Site Assessments – Pulaski, VA. A Phase I ESA performed at a closing furniture manufacturing industrial complex (over 500,000 square feet in multiple buildings on three parcels) identified multiple areas with potential environmental conditions by paints, solvents, finishes, and petroleum products used at the site since the 1930s. During a Phase II ESA, we installed numerous borings using a hollow-stemmed auger for the collection of soil and grab groundwater samples, as well as collecting numerous surface soil samples.