

# CURRICULUM VITAE

**Proposed role in the project: Civil and Environmental Engineer**

- 1. **Family name:** W
- 2. **First names:** Richard
- 4. **Nationality:** American
- 5. **Place of Residence:** Draper, Utah, USA

**6. Education:**

Date (from – to)	Institution	Degree(s) or Diploma(s) obtained:
1970-1976	Utah State University	Bachelor of Science Degree in Watershed Science
1976-1977	Utah State University	Master of Science Degree in Civil and Environmental Engineering

**7. Language skills:** Indicate competence on a scale of 1 to 5 (1 – excellent; 5 – basic)

Language	Reading	Speaking	Writing
English	Mother tongue		
German	3	3	3

**8. Membership of professional bodies:**

**9. Other skills: (e.g. Computer literacy, etc.):** Computer Applications (Microsoft Office, various surface and groundwater flow and contaminant transport models); Technical Writing; Engineering Feasibility Studies; Engineering Design; Project Management; Team Leadership

**10. Present position:** Independent Consulting Civil and Environmental Engineer

**11. Key qualifications:**

- 40 years of experience in the assessment of actual and potential environmental impacts resulting from mining operations, oil and gas development, chemical manufacturing facilities, and infrastructure construction.
- 40 years of experience in the design of plans to reclaim land that has been disturbed by mining operations and oil and gas development.
- 40 years of experience in the design of structures and systems to control runoff and sediment from disturbed areas.
- 40 years of experience in the evaluation and design of clean water supplies and distribution systems.
- 35 years of experience in the assessment and design of methods to remediate impacts to soil and groundwater resulting from the planned and inadvertent disposal of waste materials from industrial operations.
- 30 years of experience in the design of plans to stabilize river channels that are experiencing excessive erosion.
- 25 years of experience in the evaluation of impacts resulting from oil spills onto land and water, the design of methods to mitigate those impacts, and the preparation and implementation of sampling programs to assess impacts and remediation effectiveness.

**12. Specific experience in the region:**

Country	Date from - Date to
USA	1976 to present
Russia	2000-2003
New Zealand	2002-2005
Vietnam	2002-2003
Nigeria	2010-2015

### 13. Professional experience

Date from –to	Location	Company & Customer type.	Position	Achievements
1976-1977	USA	Utah State University	Research Assistant	Organized and executed a research project to assess the contribution of ephemeral channels to the salinity of the Colorado River Basin.
1977-1979	USA	Vaughn Hansen Associates (Consulting firm)	Hydrologist	Performed in-depth hydrologic investigations and designed mitigation measures for areas affected by coal mining operations in the Western United States. Evaluated the adequacy of water supplies for use at coal-fired power plants and recommended alternative surface and groundwater sources to supplement existing supplies.
1979-1983	USA	Ford, Bacon and Davis, Inc. (Consulting firm)	Senior Hydrologist	Assessed the impacts of uranium mill tailings on surface and groundwater throughout the USA. Evaluated the environmental impacts of industrial operations and designed measures to mitigate those impacts. Designed systems to control runoff and sediment yields from disturbed land. Designed and supervised construction of clean water supplies.
1983-2016	USA Russia New Zealand Vietnam Nigeria	EarthFax Engineering Group, LLC (Consulting firm)	President/Principal Civil and Environmental Engineer	Received National and International awards for plans designed to reclaim land disturbed by mining operations. Evaluated and developed plans to remediate soil and groundwater impacted by hydrocarbons, solvents, radionuclides, and metals. Developed new methods to bioremediate soil contaminated with organic pollutants, using white-rot fungi. Designed clean water supplies and distribution systems for communities and industrial facilities. Designed methods to stabilize river channels that were experiencing excessive erosion. Served as a senior technical member of teams responding to over 25 oil spills onto land and water. Evaluated potential environmental impacts of mining operations, oil and gas pipeline facilities, oil refineries, and chemical manufacturing facilities and designed methods to minimize and remediate those impacts.
2016-present	USA	Richard B. White, PE, PLLC (Independent consultant)	Consulting Civil and Environmental Engineer	Developed plans to minimize impacts to human health and the environment resulting from resource development. Evaluated potential impacts to Native American communities from oil pipeline spills. Assessed and designed methods to avoid or mitigate environmental impacts associated with infrastructure development, oil and gas pipeline facilities, and mining operations. Designed methods to stabilize river channels. Evaluated the risk of land development on the potential for increased flooding of adjacent areas.

I, the undersigned, certify that to the best of my knowledge, these data correctly describe me, my qualifications and my experience.

Richard B. White

Name of expert

*Richard B. White*

Signature

17 Mar 2017

Date