# Professional Qualifications Jeffrey M. Cerjan



#### **Education:**

B.S., Aerospace Engineering University of Kansas, 1994

## Professional Affiliations:

Institute of Noise Control Engineering

# Agency Experience:

Montana Dept of Environmental Quality Office of Surface Mining Reclamation and Enforcement

Federal Energy Regulaory Commission
Federal Highway Administration
Federal Aviation Administration
Department of Transportation
Colorado Department of Transportation
Utah Department of Transportation
Nebraska Department of Roads
California Energy Commission

# Background:

Mr. Cerjan has been practicing in the field of noise and vibration engineering since 1994. He has gained this experience in a number of fields including aircraft, industrial, oil & gas, transportation, wind and fossil fuel power facilities, and architectural. Prior to working for Hankard Environmental, Mr. Cerjan worked for Raytheon Aircraft in design, systems, structural dynamics and acoustics. At Raytheon, he gained extensive experience in aircraft interior noise and vibration measurements, analysis and design as well as take-off noise testing, analysis and certification. Mr. Cerjan then worked for The NORDAM Group where he established an acoustical engineering position for this principle supplier of integrated aircraft interiors. Since arriving at Hankard Environmental, Mr. Cerjan has completed or supported over 300 projects. He has also supported clients at governmental hearings, conducted audio demonstrations, and has provided expert witness testimony in civil lawsuits.

## Experience

#### Mining

Measured, modeled (SoundPLAN), analyzed and mitigated noise from coal, gravel, and gold mines in the US and abroad. This included both the expansion of existing mines as well as development of new mines. Extensive measurements have been taken of various mining related equipment, operations, and processes. Final documentation has included technical reports and environmental section write-ups, with additional support with public hearings and testimony.

#### Wind and Solar Power Generation

Measured and modeled dozens of utility scale wind and solar farms throughout the US. This includes detailed compliance measurements for wind farms, research measurements for the newest technology for solar facilities, and research and development of validated noise modeling techniques for both wind and solar facilities. Routinely interpret and apply state and local noise ordinanaces for such projects.

#### Oil and Gas

Completed noise permitting for oil & gas facilities including compressor stations, meter stations and pipelines. This included ambient and source noise measurements, acoustical modeling using SoundPLAN, and a variety of noise mitigation elements. Experience with several of the applicable State and Oil & Gas specific regulations across the US.

#### Industrial

Measured, modeled, and analyzed several various industrial sources and facilities including power plants (coal, oil, gas, biomass, cogen, peaking, etc.) and LNG export facilities. Familiar with a variety of noise regulations both nationally and internationally including experience with both the Federal Energy Regulatory Commission and the World Bank Group. Experience working directly with lender representatives and the public to explain our clients' position and compliance with the applicable regulations.

#### Land Development

Worked with developers regarding land development issues relating to local noise guidelines, re-zoning applications, etc. Very familiar with the variety of noise ordinances across the country. Have provided support for clients in front of City and County Commissioners, Planners, Trustees, and Legal Staff.

### Transportation Noise Analysis and Mitigation Design

Includes acoustical analysis using TNM noise modeling software to predict noise levels near highways or roadways, as well as the use of these models to design and predict the impact of any required noise mitigation. Technical noise reports were prepared in support of the EA or EIS as well as presentations to engineering personnel and the public. Co-authored the TNM User's Guide for the State of Colorado which included in-depth testing of the TNM model. Have also researched and analyzed quiet pavements and texturing methods as well.

#### **Expert Witness Testimony**

Testimony on acoustics with regard to sound propagation, mitigation, measurements, and data interpretation has been provided for civil lawsuits. Preparation for these cases included conducing measurements and analysis for our clients. The results of these findings were used as evidence in their cases. Both depositions and in court testimony have been provided.