

creating solutions for today's environment

Edward Handl, PE
Division Manager/Chemical & Environmental Engineer
Years of Experience: 39

Relevant Experience

Mr. Handl is the division manager of JBR's Butte, Montana Office. He is a Professional Engineer with almost four decades of industrial and consulting experience in environmental, chemical, utility, and waste management businesses. Mr. Handl's responsibilities have included design, project management, and operations management of technical, engineering, and processing facilities and service delivery companies. His projects have encompassed training; waste collection, transport, and disposal; solvent recycling; PCB management and disposal; salvage operations; spill response; Geoprobe® operations; Environmental Site Assessments (ESAs); environmental permitting; site remedial actions; underground storage tank (UST) work; solid and hazardous waste management; and safety.

Mr. Handl has developed and reviewed site safety plans and programs for numerous projects and has provided on-site support such as audits. He has provided testimony on environmental and waste management issues at legislative, regulatory, and permit hearings, and in contested litigation cases. He has participated in, designed, and administered public involvement processes for industrial and waste management facility siting. He has instructed college-level courses and has presented at various seminars. Mr. Handl has served on the Montana Air Pollution Control Advisory Council.

Mr. Handl's on-site experiences include project management of hazardous chemical spill responses, removal and disposal of USTs, petroleum refinery wastes, and RCRA and TSCA-regulated materials. He has also performed ESAs, remedial investigations, remedial designs, and reutilization studies for residential, commercial, mining and industrial sites.

During the course of his career, Mr. Handl has gained extensive experience in the fields of chemical engineering, environmental engineering, and project management. He has worked with municipal, industrial, and utility facilities. He has provided client services including solid and hazardous waste disposal design and permitting, spill response operations, teaching and training, site selection (for utility, industrial, solid waste, and CERCLA facilities), ESAs, site remedial actions, and project management in these areas. The following are examples of projects he has completed:

Areas of Expertise

- Site Selection/Environments Permitting
- Project Management
- Solid & Hazardous Waste/Materials Consulting
- Environmental Consulting
- Site Investigation
- Design/Support
- Remedial Design/Process Engineering

Education

- M.S. Chemical Engineering, Montana State University, 1971
- B.S. Chemical Engineering, Montana State University, 1970

Professional History

- JBR Environmental, Inc., Division Manager/Chemical & Environmental Engineer, 2003-Present
- Wildlife Protection (Chemical & Environmental) Engineer, 1988-2000
- Waste Resource Management, Technical Services Manager, 1987-1988
- Montana Power Co., Generation Engineer/Senior Engineer/Wast. Project Manager/Project Manager, 1979-1988
- Dow Chemical Co., Process Engineer/Asst. Plant Superintendent/Asst. Chemist, 1974-1979
- Dow Chemical Co., Research Engineer, 1972-1974

Licenses

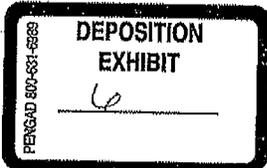
- Professional Engineer, MT
- Montana Wall Construction, MT
- Professional Engineer, Chemical, US

Supplemental Training

- Hazardous Materials Communications Training (OIT 49 CFR)
- Emergency Division Meeting
- Department of Hazardous Materials Spill Awareness
- Dimensional Leadership Training
- Handling Tank Trains - Emergency Workshop
- Sanfills, Gas Evolutions and Ground Water Corrective Measures
- Municipal Government Management
- Power Plant Siting
- Project Management Planning, Scheduling and Control
- Supervision of Hazardous Waste Operations

Affiliations

- American Institute of Chemical Engineers
- Jefferson Local Development Council, Inc., Board Member
- Montana Society of Engineers
- National Society of Professional Engineers
- Tri-Butte Engineering Society





SITE SELECTION & ENVIRONMENTAL PERMITTING

- Project Manager responsible for site selection of mining and milling waste repository locations for heavy-metal contaminated wastes on a major CERCLA NPL site near Anaconda, MT.
- Project Manager responsible for the site selection, site procurement, permit application, design, and permitting of a Subtitle D municipal solid waste landfill.
- Project Manager responsible for site selection (including public participation), of alternate disposal locations for historical mine and mill wastes, to be relocated under CERCLA, in the Butte, MT area.
- Project Manager for preparation of application for Certificate of Environmental Compatibility and Public Need Permit for a 350-megawatt coal-fired power plant planned for central Montana.
- Project Manager for the site selection (including a public involvement process) of a new municipal solid waste landfill, evaluation of public versus private landfill ownership, and preliminary landfill closure planning.
- Assistant Project Manager for environmental permit coordination on an international team investigating Oil Shale Processing, including site selection, commercial feasibility, and preliminary design, in eastern Utah.

PROJECT MANAGEMENT

- Assistant Project Manager, responsible for town site expansion, in support of twin, 750- megawatt coal fired power plants at Colstrip, MT.
- Project Manager responsible for obtaining subsurface mill tailings for elemental mercury analysis for a confidential client in the Marysville, MT mining district, in support of the Montana Department of Environmental Quality abandoned mine reclamation effort.
- Project Manager for final construction and startup of a 750-megawatt coal-fired electrical power generating plant located in Colstrip, MT.
- Project Manager responsible preparation of an industrial park feasibility report and identification and evaluation of mine and mill assets for a future industrial park, at the Golden Sunlight Mine, Whitehall, MT.
- Project Manager for construction installation of secure underground tank monitoring systems and associated vapor monitoring wells, at 50 Air Force missile launch facilities in northern Montana.

SOLID & HAZARDOUS WASTE/MATERIALS CONSULTING

- Project Manager on a PCB cleanup for a major gas pipeline company.
- Project Manager on a PCB transformer cleanup for the Montana Tech Foundation at the former Relyea Mine Site near Phosphate, MT.
- Project Manager for Remedial Investigation and facility upgrade of a bulk fuel tank farm system and dispenser site.
- Technical Consultant and Manager responsible for spill cleanup of a diesel fuel release at the Beal Mountain Mine, near Fairmont Hot Springs, MT.
- Technical Consultant responsible for removal oversight of PCB-contaminated transformer and disposal of transformers, contaminated oil, and capacitors at the University of Montana - Western.
- Project Manager and Technical Consultant responsible for soil and surface water cleanups of diesel and gasoline fuel releases at numerous sites, resulting from highway transportation accidents.
- Project Manager for the removal and disposal of pentachlorophenol-contaminated materials at numerous remote sites for the US Forest Service (USFS).
- Project manager for pre-disposal characterization, sampling and lab analysis of hazardous wastes from a platinum and palladium mine near Nye, MT, in support of a confidential industrial client.

ENVIRONMENTAL CONSULTING

- Project Manager for preparation of spill prevention, control, and countermeasure plans for multiple clients' fuel storage facilities in Yellowstone National Park, and other locations in Montana.
- Technical Consultant on a project to evaluate non-traditional electric system resources, on the basis of environmental externalities, for a large utility.



- Technical Consultant for evaluation of environmental hazards and estimation of cleanup/renovation costs of an abandoned transition-metal milling site in southern Utah.
- Lead instructor for numerous 8-hr, 24-hr and 40-hr HAZWOPER training courses and 2 landfill hazardous waste screening courses, for compliance with OSHA 29 CFR 1910.120.
- Technical consultant for Jefferson County, MT in support of Golden Sunlight Mine regarding a supplemental Environmental Impact Statement (EIS) regarding alternatives to open pit backfill.
- Project Manager for remediation of soil and ground water at multiple grain elevator sites in central Montana contaminated with chlorinated pesticides.
- Project Manager for preparation of spill prevention control and countermeasures (SPCC) plans for multiple clients in industries including retail petroleum, electric utility, agriculture, and recreation.
- Project Manager for licensed monitoring well installations (as a sub-consultant) for numerous Montana sites and prime consultants.

SITE INVESTIGATIONS

- Project Consultant for remedial investigation, design, and construction of a diesel spill remedial system using ozone delivery implants and Geoprobe technology at a fuel storage facility in Yellowstone National Park.
- Project Manager for delineation of perchloroethene (PCE) ground water contaminant plumes for multiple clients' sites, using Geoprobe technology and on site gas chromatographic analysis.
- Project Manager for numerous ASTM level 1 ESAs for property transactions.
- Project Manager for numerous level 2 site investigations, using Geoprobe/gas chromatography for on-site contaminant analysis and data acquisition.
- Project Manager for delineation of subsurface pesticide contaminants in soil and ground water at grain elevator sites in central Montana, using Geoprobe technology and on-site gas chromatographic analysis, followed by remedial designs for the locations.
- Project Manager for delineation of a subsurface heavy heating oil release, cleanup by excavation and excavation limit monitoring using real-time field gas chromatographic analysis, in Yellowstone National Park.

LITIGATION SUPPORT

- Provided written opinion to legal counsel in a personal injury lawsuit involving improper disposal of waste fireworks.
- Provided deposition and expert testimony in a trial involving allegations of contamination from improper waste management practices.
- Provided deposition and prepared written trial preparation documentation testimony for defendants in an environmental lawsuit involving assignment of responsibility for lead and diesel fuel contamination among responsible parties at a Montana rail yard CECRA (state superfund) site.
- Provided deposition and oral testimony regarding estimated remedial costs at a judicial hearing regarding a Montana rail yard CECRA (state superfund) site.
- Provided written report, review of technical reports, and cost estimate support to legal counsel in a damages litigation involving a release of refined petroleum from an underground pipeline.

REMEDIAL DESIGN/PROCESS ENGINEERING

- Project Consultant for remedial investigation, design, and construction of a diesel spill remedial system using ozone delivery implants and Geoprobe technology at a fuel storage facility in Yellowstone National Park.
- Technical Consultant for the design and installation of air-stripping ground water remediation systems to remove chlorinated hydrocarbons from aquifers at a shopping mall project and a municipal landfill site.
- Project Manager for design, construction, and remedial operations for an eastern Montana rail yard involving 30,000-gallon diesel release via dual phase product recovery using an array of small diameter wells.



- Project Manager for design and construction of a subsurface dual phase diesel fuel recovery system using an array of small diameter wells at a central Montana rail yard, to remediate historic fuel releases.
- Process Engineer for design and installation of a methyl mercaptan absorber at a mining chemical manufacturing plant.
- Project Manager for remedial injection of sodium permanganate solutions, using Geoprobe technology, to remediate PCE ground water contamination at a rail yard site.
- Project Manager for design, installation, and operation of a solar-powered free product recovery system at a petroleum release site in Great Falls, Montana.
- Project Manager for remedial injection using Geoprobe equipment, and soil mixing using heavy equipment, to apply hydrogen-release remedial chemicals to chlorinated pesticide contaminated soil and ground water.