# Curriculum Vitae Felix W. Flechas, P.E., BCEE

#### **EXPERTISE:**

- National EPA RCRA Expert for Hazardous Waste Management (Retired)
- Hazardous Waste Laws and Regulations
- RCRA and Industrial Site Closure
- Superfund/industrial Site Remediation and RCRA Corrective Action
- Groundwater Remediation
- Compliance with Environmental Laws
- Hazardous Waste Exemptions (Bevill Mining Waste, Coal Combustion Waste and Petroleum Exploration and Production)
- Federal Court Testimony/Depositions
- Court Expert Witness (Daubert Qualified)
- Environmental Law Lecturer and Engineering Adjunct Professor
- ENERGY STAR certified service provider

### **EDUCATION:**

Walla Walla University, BS - Civil Engineering University of Colorado, MS - Water Resources/Sanitary Engineering

#### LICENSES AND CERTIFICATIONS:

Professional Engineer (PE) - Colorado and Wyoming Board Certified Environmental Engineer (BCEE) - American Academy of Environmental Engineers and Scientists

#### WORK EXPERIENCE:

### Environmental Compliance and Sustainability Engineering, LLC (ECSE) Castle Pines, Colorado

Founder and managing member of ECSE which provides professional environmental compliance services to government and industrial clients. Services include but are not limited to forensic environmental investigations, regulatory and compliance analyses, and audits to determine compliance with environmental laws and regulations, environmental regulatory and technical litigation support, evaluations of the adequacy of inspections conducted by government regulators and compliance determinations made by government regulators.

ENERGY STAR building benchmarking, auditing and certification services are offered to clients in the Rocky Mountain area and in the USA.

# **Burnside Environmental Group, LLC Castle Pines, Colorado**

Member of Burnside Environmental Group which works on behalf of clients throughout the United States to provide specialized litigation support services and develop legal strategies to avoid or defend against, civil or criminal environmental enforcement actions.

# **Faculty**

# University of Colorado Denver Denver, Colorado

Adjunct professor at the University of Colorado Denver College of Engineering and Applied Science where I taught graduate level engineering classes in 1) Environmental Laws and Regulations, 2) Hazardous Waste Site Remediation, 3) Hazardous Waste Management, and 4) Sustainable Urban Water Systems.

# University of Missouri Science and Technology Rolla, Missouri

Adjunct Professor at the University of Missouri Science and Technology College of Engineering where I teach Environmental Law and Regulations.

# **Managing Director**

## Center for Sustainable Infrastructure Systems University of Colorado Denver Denver, Colorado

As Managing Director of the University of Colorado Denver, Center for Sustainable Infrastructure Systems (CSIS), I was responsible for:

- Development of the Center's Strategic/Marketing Plan and Resources Budget;
- Development of strategic initiatives;
- Annual assessment of strategic achievements, strengths, weaknesses and redirection needed for the upcoming year;
- Establishing and engaging the CSIS External Advisory Board;
- Development of External Partnerships at the local, state and national level with businesses, industries, and governments;
- Development of Internal Partnerships with other UC Denver colleges, the Anschutz Medical Campus and with the UC Denver Administration;
- Oversight of CSIS Financials and Activity Summary; and
- Oversight of large external partnership projects.

# **<u>RCRA Enforcement Team Leader</u>**

### USEPA, Region 8 Denver, Colorado

Served as the team leader of the EPA Region VIII Resource Conservation and Recovery Act (RCRA) Enforcement Team. As team leader:

- Developed and negotiated enforcement and inspection targets for the Enforcement Program;
- Developed and oversaw civil enforcement cases;
- Supported the chosen enforcement response and provided the necessary support for subsequent negotiations or litigation;
- Lead, advised, and mentored a diverse technical and professional staff responsible for RCRA enforcement activities in six states;
- Assisted in the development, implementation and interpretation of national RCRA policies and procedures;
- Provided professional engineering evaluations of RCRA waste management landfill liner and cover designs to Regional RCRA and Superfund programs
- Represented EPA Region VIII at policy meetings, national conferences and on various national workgroups which included the Pharmaceutical Universal Waste Rulemaking Workgroup and the Coal Combustion Waste Workgroup.

## **Environmental Engineer (Technical Enforcement Program)**

#### USEPA, Region 8 Denver, Colorado

Served as team leader for the technical enforcement team responsible for clean-up of a metal refinery. The team leader was responsible for;

- Development and implementation of EPA's regulatory compliance, risk assessment, remediation, and worker health issues;
- Regulatory issues related to the Bevill exemption and mining beneficiation waste interpretations;
- Coordinating team members which consisted of scientists, engineers, geologists, toxicologists, industrial hygienists, epidemiologists, and lawyers from the state DEQ and EPA regional and HQ offices;
- Serving as project lead engineer/project manager for RCRA and Superfund site remediation;
- Development of technical strategies and solutions to environmental, ecological and human health problems and preparation of Agency decision documents and responses to the problems. Responses required coordinating with multiple environmental state and federal agencies and DOJ and briefings for higher level management at the Regional and national level;
- Litigation support for government environmental enforcement which included testimony in the Utah Federal District Court, depositions on hazardous waste issues and development of government settlement positions.

# **Environmental Engineer (Solid and Hazardous Waste Program)**

### USEPA, Region 8 Denver, Colorado

Duties of this position were to:

- Serve as EPA's National and Regional Expert in Hazardous Waste Management while providing hazardous waste management, site remediation and geo-technical design evaluations and permitting assistance at hazardous waste sites and remediation projects throughout EPA Region VIII and internationally;
- Serve as a senior project manager/Team Leader for permitting and enforcement order negotiations, hazardous waste permitting, hazardous waste site investigations and inspections, waste management studies, and managed clean-up of industrial hazardous waste facilities. (Two national EPA awards for innovative management of hazardous waste site remediation teams were awarded to my teams);
- Serve as EPA's Region 8 Expert Witness for hazardous waste management issues during court testimony and depositions;
- Representative of US/EPA to foreign governments for assistance with and training in hazardous waste management issues;
- Represent EPA Region 8 on national workgroups and as the regional coordinator for issues and regulations dealing with DNAPL remediation, soil vapor intrusion, hazardous waste site closure and post-closure, bio-remediation technologies, corrective action for ground water and soil chemical contamination, hazardous waste landfill construction, petroleum refinery waste regulations, federal land disposal restrictions, and petroleum exploration and production wastes and exemptions;
- Provide training to industry and government personnel on hazardous waste management, treatment, and disposal regulations and policies;
- Develop and negotiate civil environmental enforcement orders and hazardous waste management RCRA permits.

# **PROJECT EXPERIENCE:**

Arbitration expert witness for a complex oil spill;

Expert witness in an administrative order proceeding at a power plant;

Environmental monitoring audit of a munitions manufacturer;

Expert witness in a matter challenging the adequacy of a state issued environmental enforcement order;

Expert witness and regulatory support in a hazardous substance (PCBs) trespass matter;

Expert witness and regulatory support in a matter related to treatment/recycling of hazardous wastes at a UIC well site;

Expert witness in the assessment of federal enforcement actions taken against an oil and gas midstream waste treatment facility;

Regulatory support in a pipeline release of oil and gas produced water;

Regulatory, technical and litigation support in a plastic recycling/reuse enforcement matter;

Regulatory analysis of state waste determinations regarding steel production waste reused as a fertilizer;

Litigation technical and regulatory support in a matter related to electroplating wastes;

Development and teaching of hazardous waste large quantity generator regulations course;

Litigation technical and regulatory support to determine sufficiency of evidence for defense against a government penalty action at a water/waste treatment facility;

Assessment of federal enforcement actions taken against a plastic recycling facility;

Review and evaluation of clean up actions taken at a plastic recycling facility;

Compliance audit and development of regulatory compliance options for a regional battery distribution warehouse;

Evaluation of cover failure at a Superfund landfill;

Evaluation of landfill cover design at a Superfund landfill;

Evaluation of landfill liner and cover designs at RCRA commercial landfill;

Federal Team leader for development of remediation protocols at a metal refinery Superfund site;

Federal lead for closure, post-closure and corrective action at a large oil refinery with multiple land based waste management units;

Permit Team leader for hazardous waste permitting of a commercial hazardous waste integrated treatment/landfill facility;

Permit Team leader for permitting the closure, post-closure, and capping of four large oil refinery sludge surface impoundments;

Permit Team leader for hazardous waste permitting of a container and tank storage facility at an industrial solvent distribution center;

Permit Team leader for hazardous waste permitting of a container storage area at a US Air Force base;

Permit Team leader for hazardous waste permitting of a sulfide treatment facility at a natural gas sweetening plant;

Permit Team Leader for hazardous waste permitting of a refinery hazardous waste land treatment facility;

Project Team Leader for studies of in-situ biological and physical/chemical remediation technologies at a wood treatment site;

Project Team Leader for remediation of two large and complex oil refineries and a 420-acre wood treatment facility;

Team Leader for research effort to determine the effects of thermally-enhanced water flooding on oil recovery from alluvial aquifers;

Team Leader for research effort which determined the sludge retention efficiency of petroleum refinery API separators;

Team leader and US/EPA representative to Czechoslovakia for environmental evaluation and site characterization of a used oil refinery and for providing technical assistance on new refining techniques and technologies;

US/EPA representative to the Cook Islands Nation for technical assistance on siting and designing a national solid waste landfill and for creation and implementation of a national solid waste management strategy;

Team leader and US/EPA representative to India for environmental evaluation and site characterization of an abandoned chromium refinery site and for providing technical assistance on new refining techniques and technologies;

Team leader and US/EPA representative to Malaysia for technical evaluation of a proposed national hazardous waste treatment and disposal facility;

US/EPA representative to Malaysia to train Malay Environmental Protection Agency staff in methods and skills needed for writing environmental hazardous waste permits; and

Member of the Science Advisory Committee, Great Plains/Rocky Mountain Hazardous Substance Research Center at Kansas State University.

### **PUBLICATIONS:**

Book Chapter: "Regulatory Evaluation and Acceptance Issues for Phytoremediation Projects", <u>Advances in Biochemical Engineering/Biotechnology</u>, Tsao and Tsao, Springer-Verlag, 2003.