FC&E Engineering, LLC (601) 824-1860

Brandon – Starkville Monroe - St. Louis





Statement of Qualifications





FC&E Engineering, LLC PO Box 1774 Brandon, MS 39043

Fax: (601) 824-9627 www.fce-engineering.com





FC&E Engineering, LLC (FC&E) provides environmental permitting, compliance management, and environmental consulting to a broad range of clients including chemical production, energy, manufacturing, wastewater treatment, wood products, healthcare and universities, petroleum product operations, and select state and federal agencies. Our

team can work in unison with your staff or other consultants such that the backgrounds of each individual compliment the other team members to ensure that projects are performed in an efficient manner, completed on-time, and within budget.

With many years of combined experience in environmental engineering and management, including

planning and construction projects, FC&E and its team members provide engineering, project management, environmental permitting and compliance assistance, as well as construction stormwater management for any size project. Through our experience, we can provide **turn-key environmental permitting** (Air including modeling – Wastewater – Stormwater – Wetlands Permitting - Solid Waste – Hazardous Waste Management), environmental compliance audits, expansions and plant modification planning and permitting, environmental engineering, as



well as **total environmental compliance management** (Contingency Plans, Closure plans, Remediation Work Plans and Cleanup Plans for Contaminated Soil and Groundwater, SPCC Plans, SWPPP, and Training in each of these areas).



We have performed projects for a wide variety of industrial, municipal, state and commercial facilities. Our diversity has sharpened our skills and allowed continued growth in all aspects of our company. Our clients have confidence in our ability to meet their goals and exceed their expectations. This is evidenced by these key-clients repeatedly contacting FC&E to perform additional environmental engineering and compliance project

work. In understanding our strengths, we can work with others to ensure that projects are completed effectively, regardless of the dynamics of the particular project. Project and client references can be provided if desired.

FC&E Engineering originated in 1999 in Brandon, MS. Since that time, we have performed projects for a wide variety of industrial, municipal, state and commercial facilities. FC&E is licensed to practice engineering in various states. Most recently, FC&E has worked with specific key-industrial sectors such as the chemical and fertilizer industry (nitrogenous, phosphates, and potash facilities), power plants, oil and gas facilities, healthcare industry (hospitals), universities, federal prisons, specialized wood products, agriculture production, and biofuels.



Engineered Solutions to Environmental Challenges

FC&E Engineering ensures solutions through:

- Turnkey Environmental Permitting
- ✓ Consistently Achieving Client Project Objectives
- Ensuring Deadlines Are Met
- ✓ Providing Cost Effective Solutions
- ✓ Being Client-Oriented & Task Driven
- ✓ Utilizing only Experienced, Focused, and Dedicated Professionals



FC&E's extensive environmental experience and proven success comes from State & Federal Regulatory Programs Understanding and well established Relationships with Regulators



SECTOR LISTING - PROJECT EXPERIENCE

FC&E's experience includes Project Planning, Design, and Comprehensive Environmental Engineering and Compliance Management of projects in a wide range of private, commercial, municipal, state, and industrial sectors as listed below:

- Energy /Power Plants including Electrical Cogeneration
- Parts Manufacturing and Remanufacturing Facilities
- Chemical Plants
- Asphalt and Concrete Manufacturing
- Ammonia, Nitric Acid, Urea
- Ammonium Nitrate Fertilizer Grade & Industrial Grade
- Natural Gas Transmission
- Wastewater Treatment
- Sulfuric Acid
- Phosphoric Acid
- Ammonium Phosphates
- Automotive Products Manufacturing
- Furniture Manufacturing
- Gypsum Disposal
- Potash Mining & Refinery
- Potash Compaction
- Gravel and Mining Operations
- Universities & State Institutions
- Healthcare and Hospitals
- Municipalities
- Wood Products including Sawmills, OSB, Pulp & Paper, Pellets
- Agricultural Facilities, R&D and Grain Terminals
- Biodiesel and Ethanol Production
- Second Generation Biofuels
- Solid Waste Management Facilities
- Petroleum Products Marketing, Blending, Production, and Distribution
- Oil and Natural Gas Processing Facilities
- Expert Witness Testimony

Environmental Engineering Services Snapshot:

<u>Air Permitting</u> (NSR, PSD, Title V, Synthetic Minor, NSPS, NESHAP, MACT) & Compliance Ambient Air <u>Modeling</u> for NAAQS, Air Toxics, or Regional Haze Environmental <u>Compliance Audits</u> – Comprehensive All EPA and State Program Areas Wastewater Permitting and Compliance Management Hazardous Waste Management, RCRA Contingency Plans, Remedial Plans Solid Waste Landfill Permitting and Management Wetland Delineations and COE Permitting Tier II, Toxic Release Inventory Reporting, Waste Minimization Storm Water Management, Spill Prevention Control and Countermeasure Plans, and Training <u>Spill Management Services</u> – onsite spill management, cost tracking, rain contingency plans, O&M

plans, delineation of impacted areas, sampling, followup monitoring and reporting.

KEY PROJECTS Some key projects performed are listed below:

Turnkey Environmental Permitting Renewable Energy Facilities

Drax Biomass International Amite Facility and Pike County Facility

FC&E provided turnkey environmental permitting services for two large renewable energy facilities in Mississippi. The Amite BioEnergy, LLC facility is located in Amite County and includes both an 80-acre and an additional 25-acre site. The Pike BioEnergy, LLC facility is proposed for location in Pike County on a 180-acre site. FC&E staff performed environmental site assessments and conducted wetland, cultural resource, and threatened/endangered species surveys. FC&E prepared all required wetlands, air, wastewater, stormwater, and solid waste permits for these two facilities. Additionally, FC&E performed construction related services for the Amite Facility including management of surveying, geotechnical engineering, and development of civil site grading plans and contingency plans.





Project Features

Environmental Site Assessments

Wetlands, Threatened/Endangered Species, Cultural Resources

Permitting for Wetlands, Air, Wastewater, Stormwater, Solid Waste

Surveying, Geotechnical, and Civil Site Grading Plan Management

Integrated Contingency Plan

Reference

Philippe DeMontigny (617) 588-2904 philippe.demontigny@draxbiomass.com

Key Staff (Role)

Russ Twitty (Project Manager)

Chad Winter (Air, Wetlands, Wastewater Permitting)

Jeremy Smith (Wetlands, USACE Permitting, Mitigation)

Bruce Ferguson (Modeling)

Charles Cook (Integrated Contingency Plan)

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Far Field Building Project & Infrastructure Improvements Raytheon Space & Airborne Systems

Scott County, MS

FC&E preformed design, engineering, construction services for infrastructure improvements for Raytheon's Far Field Building Project in Scott County, MS. FC&E staff performed civil and environmental engineering services that included management of surveying, geotechnical engineering, and a civil site grading plan for the facility. The project involved design engineering for existing utility relocations and design of a new utility corridor. Project required close coordination with Raytheon personnel, Yates Construction, Gas Pipeline personnel, Electrical Power personnel, and architectural firm, as well as state and local agencies including MDOT.

FC&E developed a closure plan and gained MDEQ approval for the closure of the existing on-site wastewater treatment system and tie-in of the facility to the city system. FC&E worked closely with Mid-South Consulting to prepare design engineering and construction bid documents.





Project Features

Civil and Environmental Engineering

Wastewater Tie-in to City and Closure of Onsite Treatment System

Closure Plan Development and MDEQ Approval

Surveying, Geotechnical, and Civil Site Grading Plan Management

Large Construction NOI and CSWPPP

Reference

Raina Cofer (601) 469-5764 raina.m.cofer@raytheon.com

Key Staff (Role)

Ken Faulkner (Project Manager, Design)

Calvin Abernathy (Mid-South Consulting - Design Engineer)

Charles Cook (Stormwater Plan and Construction Oversight)

Chad Winter, Jeremy Smith (Wetlands)

Rusty Lyons (Lagoon Closure Plan & Lagoon Closure Oversight)

Design-Build for Contingency Planning Phases I and II

Caterpillar, Inc. Corinth, MS

FC&E was retained by Caterpillar, Inc. to perform design, engineering, installation, and construction oversight services of contingency structures in Corinth, MS. This was a two phase multi-year project in excess of \$1.5MM.

FC&E staff prepared conceptual and final design documents (30%, 50%, 90%, 100%) prior to construction. FC&E staff prepared storm water management plans, spill prevention plans, and provided construction oversight during the construction of the contingency structures. FC&E worked with Mid-South Consulting to prepare final design documents and all bid specification documents prior to award of construction. Final walk though, project acceptance, and closeout services were also provided.





Project Features

Contingency Planning

Conceptual and Final Design (30%, 50%, 90%, 100% Reviews)

Construction and Installation

Engineering Oversight of Construction

Final Walkthrough and Project Acceptance

Reference

Keith Hardwick, REM (662) 286-7434 hardwick_keith@cat.com

Key Staff (Role)

Ken Faulkner (Project Manager, Design)

Russ Twitty (Planning, Project Implementation Manager)

Calvin Abernathy (Mid-South Consulting - Design Engineer)

Charles Cook (Stormwater Plan and Construction Oversight)

- Provided *turn-key environmental permitting* for a proposed biodiesel and ethanol facility. Work involved an initial environmental site assessment, Large Construction Stormwater Notice of Intent and Construction Stormwater Pollution Prevention Plan (SWPPP), Air Construction Permit Application development, Wastewater Pretreatment Permit Application, NPDES Wastewater Discharge Permit Application preparation, and Baseline General Permit for Stormwater Associated with Industrial Activities. Additional work performed for this client involved the Synthetic Minor Air Operating Permit application preparation for this facility.
- *Wetland delineations for a 35 mile pipeline project*. Performed field work to delineate wetland areas, prepared report or findings including Trimble GPS mapping and site figures.

Developed jurisdictional determination request and assisted with Corps of Engineers permitting for the entire pipeline section.

- *Prepared individual COE permit applications and JD requests* for numerous clients in three states. Prepared mitigation plans, field observation and oversight of mitigated areas, developed progress and annual reports on mitigated properties.
- Provide wetland delineations to determine the presence of jurisdictional wetlands and other waters subject to regulation under Section 10 of the Rivers and Harbor Act and Section 404 of the Clean Water Act.
- Developed *closure plans* for the closure of two separate on-site sedimentation ponds for a surface mining operation.
- Managed the *clean-up of a mercury spill* at a power plant. Work involved the initial site assessment, coordination of clean-up contractor, regulatory requirements, transportation and disposal management, completion of manifest and follow-up documentation.
- Developed numerous *Spill Prevention Control and Countermeasure Plans* and *Stormwater Pollution Prevention Plans* for various power plants, manufacturing facilities, sawmills, and industrial sites.
- Compile Army Corps of Engineers permit applications for activities that impact jurisdictional wetlands and other waters, and provide pre-application consultations with Army Corps of Engineers to determine effective permitting strategies for Nationwide, Regional, or Individual Permits.
- Provide consultations with state and federal agencies that are required to review permit applications for projects regulated by the Army Corps of Engineers. These agencies include historic preservation offices for cultural resources and wildlife agencies for threatened and endangered species.
- Provide recommendations for mitigation requirements to offset project impacts to wetlands and other waters associated with Section 10 and Section 404 permitting.
- Section 10 and Section 404 permit applications have been successfully completed for a wide array of projects from infield oil developments, oil and gas pipelines, renewable energy projects, roadway developments, and industrial facility construction.

- FC&E has prepared and assisted various clients in six states with Title V air operating permit applications, synthetic minor permit applications, minor modifications, moderate modifications, 502(b)10 requests, administrative amendments, CAM plans, actual emissions for fee purposes, semi-annual monitoring reports, stack testing coordination, annual compliance certification report preparation, and many other engineering services on an ongoing basis.
- Comprehensive Environmental Compliance Audit at a large University and Hospital complex. Managed and coordinated the audit as well as participating as an audit team member covering several program areas. Comprehensive audit covered Air Quality Permitting including Title V, NESHAP Standards, Risk Management Plans & Dept of Homeland Security Plans, Asbestos & Lead Paint, Ozone Depleting Substances, Fuel Dispensing & Fleet Operations, Hazardous Waste Management & Haz Materials, Medical Waste, Solid Waste, Wastewater – NPDES & Pretreatment, Storm water – Construction & Baseline Industrial, Spill Prevention Control & Countermeasures, Underground Storage Tanks, Superfund Amendments and Reauthorization Act (SARA), Radiation, Potable Water, PCBs, and Pesticides Management. Developed power point presentation of audit findings and presented to facility at conclusion of audit. Developed audit findings report and negotiated with State Agency for Agreed Order and resolution of findings.
- Environmental Compliance Audits for *eight chemical manufacturing and mining* **operations**. Work involved the field reconnaissance and inspection of records and interviews of personnel to perform comprehensive environmental compliance audits covering approximately 52 topic areas. Advanced software was used to develop checklists, track audit results, and to produce reports for facility managers to review and resolve findings.
- Air emissions compliance testing coordination and oversight including RATAs on four gas fired turbines at a *large power generation plant* subject to acid rain regulations and PSD permit requirements.
- Submitted *NOx and VOC banking applications to the Louisiana Department of Environmental Quality* (LDEQ) for four plants located in the Baton Rouge nonattainment area. Also, provided consulting services and recommendations to facilities with affected sources subject to the NOx RACT regulations.
- Wastewater sampling, *pretreatment permit applications* preparation, and air permit applications preparation and for two manufacturing facilities involving surface coating of metal parts. Also, prepared solvent management plans for these two facilities.
- Wastewater sampling and NPDES and Pretreatment permit application preparation for a *large power generation plant* subject to Performance Standards of 40 CFR 423.

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- Title V Air Operating Permit Application and compliance strategies for *two separate oil refineries* on the Gulf of Mexico. Work involved documenting the current compliance status, determining both point source and fugitive air emissions levels, as well as developing compliance strategies to maintain compliance with federal and state air quality standards such as NSPS, MACT, and PSD throughout the five-year permit term.
- Sized and designed pond layout for a *recirculation water supply pond* for a large wet log storage operation. Site layout, pond size, and overflow pipe were designed to maintain sufficient freeboard to hold a 25 year, 24-hour return storm event.
- Provided *comments and agency negotiations* with the MDEQ regarding a draft wastewater permit for the Mississippi Army Ammunition Plant owned by the U.S. Army. Comments provided by FC&E included *instream waste concentration and chemical translator equations* to justify higher metals (copper, lead, and zinc) limits based on hardness and total suspended solids relationships. Permit limits for these three metals were increased significantly as a result of the newly calculated water quality standards.
- **Title V Air Operating Permit Application** for a *multi-plant chemical manufacturing* facility. Facility noncompliance issues were resolved. Applicability of NSPS of 40 CFR 60 Subparts Dc, Kb, and VV and MACT standards of 40 CFR 63 Subparts F, G, H, I, and U were assessed. Title V application forms and supporting documentation were prepared and submitted to the state agency. Stack testing oversight, completion of construction permit applications and NSPS notifications were also performed for the facility.
- **Comprehensive environmental compliance audits** at 26 hospitals throughout Mississippi, Arkansas and Tennessee. Ten major EPA regulated program areas were covered including Clean Air Act, Clean Water Act, RCRA, UST, CERCLA, FIFRA, TSCA, and Safe Drinking Water Act.
- *Air permit applications preparation,* wastewater sampling, and pretreatment permit applications preparation for two manufacturing facilities involving surface coating of metal parts.
- Prepared a Title V Air Operating Permit Application and compliance strategy for *a natural gas compressor station* involving four compressor engines and four glycol reboilers. Work included calculating fugitive and point source air emissions, determining the compliance status with existing and future regulations and completion of the Title V air operating permit application. Additionally, completed and submitted to the State a permit modification application for this compressor station so that the noncomplying unit could be in compliance by the time that the Title V permit was issued by the State.
- Title V Air Operating Permit Application for a large *tire manufacturing* facility. Work involved documenting the current compliance status, determining both point source and

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fugitive air emissions levels, as well as developing compliance strategies to maintain compliance with federal and state air quality standards such as NSPS and PSD throughout the five-year permit term.

- Prepared and submitted to the State and EPA for review, **Title V Air Operating Permit Applications and compliance strategies** for five separate publicly owned *power generation plants* in three cities. Work involved documenting current compliance status, completion of the application forms, determining both point source and fugitive air emissions levels through calculations and stack tested data, as well as developing compliance strategies to maintain compliance with State and Federal air quality standards such as NSPS and PSD throughout the five year permit term. These facilities have all received final Title V Air Operating Permits.
- Construction and modification permitting for an *organic chemical coating manufacturing* facility. Work involved the preparation of the air permit applications, calculations and supporting documentation. Additional work performed for this client involved the assistance in the Title V permit application preparation for this facility.
- **PSD permit application preparation** for a *soybean processing facility* modification. Worked involved the preparation of all required elements of the PSD regulations including BACT analysis, screening models, construction permit application, impact analysis, and report.
- PSD permit application preparation for a *steel foundry* modification. Worked involved the preparation of all required elements of the PSD regulations including BACT analysis, screening models, construction permit application, impact analysis, and report. Refined ambient air quality dispersion modeling was performed as well.
- PSD permit application preparation for a new *edible oil refinery*. Worked involved the preparation of all required elements of the PSD regulations including BACT analysis, screening models, construction permit application, impact analysis, and report.
- **Conducted** *onsite training* for SPCC, SWPPP, Universal Waste, RCRA, SARA and TRI Reporting for various manufacturing operations.
- Coordinated *groundwater monitoring well installation and sampling activities* for various clients involving different constituents of concern. Development of Monitoring Well Installation and Sampling Reports, Source Delineation Reports, Groundwater Sampling Reports for Quarterly and Semi-annual Reporting, Monitoring Well Decommissioning Reports, RECAP Screening Reports, Focused Characterization and Abatement Reports, etc.
- Provided a detailed air emissions inventory and Title V application preparation for a *large manufacturer and tester of aircraft engines*. Work involved a complete environmental air audit of the facility, documentation and location of air emission sources, and calculations of all

suspected air emissions via mass balance, emission factor derived, and measured data calculations, completion of a regulatory applicability evaluation and completion of the Title V application forms.

- Performed numerous *Phase I, II, and III environmental site assessments* for commercial, industrial and private clients in various states.
- Performed Title V air permit application reviews as an *engineering consultant to the Mississippi Department of Environmental Quality*. Work consisted of assisting the MDEQ with a backlog of Title V air permit applications including merchant power plants, natural gas compressor stations, and manufacturing plants including NSPS, PSD, and MACT standards and New Source Review permit conditions.
- Developed *RCRA Part B permit renewal application package* for large chemical plant. Work involved the development of updated closure costs, closure plan, updated solid waste management unit descriptions and figures, flood elevation considerations, and all required components of the hazardous waste permit renewal submittal.
- Prime engineer for major Restore Act project along the gulf coast in Hancock County, Mississippi involving *design, bid phase, and construction oversight* of 5.9 miles of breakwater, 46 acres of constructed marsh, and 46 acres of subtidal reef. FC&E is currently performing project management services, bid phase services including facilitating the pre-bid conferences, bid tabulation, bid award package preparation, construction oversight services, and project closeout. This is a multi-phased project which has a total cost of approximately \$50MM.

FC&E has extensive environmental management experience from the staff backgrounds to the projects performed. Attached are Firm Resumes for **Specific Key Individuals of FC&E**.



FC&E Engineering, LLC

Company	Location	Project
Entergy, Inc. Power Plants	Greenville, Vicksburg, Jackson, and McAdams Power Plants	NPDES Permitting and Water Balance Diagrams/Flow Analysis; Air Permitting; SPCC
Clarksdale Public Utilities Power Plants	3 rd St. Power Plant, Crossroads Energy Center Plant, Wilkins Generating Station – Clarksdale, MS	SPCC Plans, SWPPPs, NPDES Permitting; Air Permitting; and Training at all locations. GHG Reporting
Intrepid Potash Mining Operations	New Mexico	Ambient Air Modeling; Air Permitting; Environmental Compliance Audits; Mine Closure Plans
Caterpillar, Inc. Remanufacturing of Diesel Engines	Corinth & Booneville, MS Dyersburg TN	Title V Air Permitting; NPDES Permitting and Water Balance Diagrams/Flow Analysis; Synthetic Mino Air Permit Application Development; Waste Minimization Plans; SPCC plans
Holcim (US) Inc. Mining and Cement Production	Artesia, MS; Birmingham, AL	Title V permit; RCRA Part B permit; NPDES permit renewal application including Water Balance Diagrams; Solid Waste Permit Renewal Application; SPCC Plan
Vicksburg Petroleum Petroleum Blender/Marketer	Vicksburg, MS	Antidegradation Study; NPDES permit application
Shell Oil Company - Refinery	Mobile, AL	Title V Air Permit Application
Tellus Operating Group	MS, LA	Title V Air Permit Applications; Construction and Synthetic Minor Air Permit Applications; GHG Reporting
Scott Petroleum	Mississippi	Groundwater Monitoring Coordination; SWPPP, SPCC Plan, NSPS Plan

Company	Location	Project
El Paso Energy	Louisiana Facilities	Title V Air Permit Application
Natural Gas		Certification and Review
Weyerhaeuser	AL, MS, LA, AR	Air Construction PSD permits; Wastewater permits; SPCC plan certifications; Stormwater permits; Landfill applications
Williams Gas Pipeline	MS and LA	Air Permit Modifications; Title V Air
Natural Gas	Compressor Stations	Permit Applications; Ambient Air Quality Modeling
Nexen Marketing Petroleum Blender/Marketer	Petal, MS	Air Emissions Inventory; SPCC Plan; SWPPP
Continental Tire	Clinton, MS	Air Emissions Inventory; Air Construction Permit; Water Pretreatment Permit; SPCC Plan; SWPPP
Various Oil Companies	MS, LA & AL	Air Permit Modifications; Title V Air Permit Applications; oil well locations and gas processing plants
Terra Mississippi Nitrogen/CF Industries	Donaldsonville, LA; Yazoo City, MS	 Groundwater Monitoring Coordination, Statistical Analysis, RECAP studies, Semi- annual Groundwater Report development LPDES permit application preparation, Title V (Part 70) permit application preparation, NOx & VOC Emission Reduction Credits Banking, SPCC and SWPPP plan development, NOx RACT Compliance and RATA testing ERIC Reporting for air emissions Solid Waste Permit renewal and permit consolidation Basin Closure Plans and Soil Beneficial Reuse Plan preparation



Ken L. Faulkner, P.E. FC&E Engineering, LLC <u>kfaulkner@fce-engineering.com</u>

CAREER OVERVIEW

FC&E Engineering, LLC

Senior Consultant/Principal, FC&E Engineering, LLC

FC&E is a client focused, compliance oriented, and value-added environmental engineering and consulting firm serving clients throughout the southeast

Mississippi Chemical Corporation

Sr. Coordinator of Environmental Affairs MCC was a chemical and fertilizer manufacturer with facilities in various states and the Republic of Tobago/Trinidad

Triad Nitrogen, LLC/Melamine Chemicals, Inc.

Environmental Coordinator & Lab Supervisor

Triad Nitrogen produces ammonia and urea products. Melamine Chemicals produces melamine used in resins and laminates. These co-located plants are based in Donaldsonville, LA along the Mississippi River corridor.

Environmental Consulting Firm – Jackson, MS

Senior Engineer/Project Manager A Southeastern US environmental consulting firm in which my efforts were focused on Air and Wastewater Management Projects and Permitting.

Mississippi Department of Environmental Quality

Air Division, Title V Branch Chief Air Division, Environmental Engineer II Municipal Wastewater Construction Branch, Project Engineer

PROFESSIONAL REGISTRATIONS, AFFILIATIONS AND CERTIFICATIONS

- Professional Engineer: Mississippi, Alabama, Arkansas, New Mexico, Louisiana and Tennessee
- Past Chairman, Mississippi Chapter of Air & Waste Management Association
- Mississippi Manufacturers Association Energy and Environmental Committees
- Member of American Society of Civil Engineers
- Member of Mississippi Energy Coordinators Association

EDUCATION AND TRAINING

- Mississippi State University, M.S., Environmental Engineering, 1992
- Mississippi State University, B.S., Civil Engineering, 1986

EXPERTISE AND RELATED ACTIVITIES

Recent key environmental projects:

- Team Leader for Comprehensive Environmental Compliance Audit at *a large University and Hospital complex*.
- Team Leader for comprehensive environmental compliance audits at 26 hospitals throughout Mississippi and Tennessee. Ten major EPA regulated program areas were covered including Clean Air Act, Clean Water Act, RCRA, UST, CERCLA, FIFRA, TSCA, and Safe Drinking Water Act.
- Team Leader for environmental compliance audits for *eight chemical manufacturing* and *mining* operations. Areas covered by Mr. Faulkner were Clean Air Act, Asbestos, Ozone Depleting Substances, and SPCC Plans.
- Provided *turn-key environmental services* for a renovated *sawmill* operation. Work involved an initial environmental site assessment, stormwater permitting, air construction and operating permitting, and NPDES wastewater discharge permit application preparation.
- Prepared and submitted to the State and EPA for review, Title V Air Operating Permit Applications and compliance strategies for five separate publicly owned *power generation plants* in three cities.
- Construction and modification permitting for an *organic chemical coating manufacturing* facility.
- Performed Title V air permit application reviews as an *engineering consultant to the Mississippi Department of Environmental Quality.*

PROFESSIONAL SPECIALTIES

- Clean Air Act, Synthetic Minor, Title V, and PSD Permitting and Compliance Strategies
- Air Emissions Evaluations and Control Techniques
- Certified Visible Emissions Evaluator per EPA Method 9
- Comprehensive Environmental Compliance Audits & Phase I, II, III ESAs
- Wastewater Engineering and Permitting
- Spill Prevention Control and Countermeasures (SPCC) Planning
- Stormwater Pollution Prevention Planning
- Waste Management Plans & Closure Plans
- Civil Projects Consulting
- Proficient use of emissions estimation software including TANKS 4.09, FIRE 6.24, WATER9, Landfill Gas Emissions Model 2.01, PM Calculator Version 2.0, SIMS and AIRS
- 40 hour Hazwoper Trained and has a current Method 9 VEE Certification
- Provided SPCC, SWPPP, Tier II, Universal Waste, & RCRA Training to various clients



Director of Operations

Richard Harrell, P.E., BCEE FC&E Engineering, LLC rharrell@fce-engineering.com

CAREER OVERVIEW

- Executive level manager with over twenty-five years experience in environmental programs
- Leadership experience ranging from small teams to directing over 300 staff
- Management of annual budgets up to \$190 million
- Lead role in historic natural and manmade disasters, including the BP Oil Spill, Great Mississippi River Flood of 2011, hurricanes and tornadoes
- Developing policy and regulation for MDEQ's programs
- Investigation, Remediation and Closure of contaminated sites though out Mississippi

PROFESSIONAL REGISTRATIONS, AFFILIATIONS AND CERTIFICATIONS

- Professional Engineer Mississippi Board of Licensure for Professional Engineers and Surveyors
- Board Certified Environmental Engineer American Academy of Environmental Engineers
- Certificate of Supervisory Management MS State Personnel Board

EDUCATION AND TRAINING

- B.S. Chemical Engineering, Mississippi State University, 1992
- M.S. Environmental Engineering, University of Mississippi, 1999

EMPLOYMENT RECORD

Director of Operations

FC&E Engineering, LLC, Brandon, Mississippi

Duties include managing senior level engineers and other technical staff. Providing engineering design of industrial environmental projects, developing environmental permit applications including RCRA treatment, storage and disposal (TSD) permits, solid waste permits, mining permits and construction storm water permits; developing sampling and closure plans; conducting sampling activities; performing environmental site assessments and providing expert testimony.

Director, MDEQ Office of Pollution Control (OPC); Branch Mgr, MDEQ/OPC Environmental Permits Division, Mgmt Support Branch; Staff Engineer, MDEQ/OPC Hazardous Waste Division Mississippi Department of Environmental Quality (MDEQ) 1993 – 2016

As the Director of OPC, served as Senior Executive Management for MDEQ with over 300 employees ranging from engineers, geologist, scientist, accountants, IT staff, and others. Formulated policy, interpretations of state environmental laws and regulations.

2016 -

Before that served as Branch Manager in the Environmental Permits Division and prior as Staff engineer in the Hazardous Waste Division.

EXPERTISE AND RELATED ACTIVITIES

Senior Engineer related to environmental regulation, risk and management. Areas of expertise include environmental policy, chemistry, disaster response, risk assessment, hazardous materials science, and environmental regulation. Specific interests include response and restoration to environmental disasters, remediation/reuse of contaminated sites, and establishment of effective environmental indicators. Regulatory experience related to the Resource Conservation Recovery Act, Clean Water Act, Clean Air Act, National Environmental Policy Act, Oil Pollution Act and Comprehensive Environmental Responsibility, Compensation and Liability Act.

PROFESSIONAL ACTIVITIES AND COMMITTEES

BP Deepwater Horizon Oil Spill: Served as the Lead Incident Commander (IC) representing the State of Mississippi during the BP Deepwater Horizon oil spill. Served under the MDEQ Executive Director and Governor as Mississippi IC at the Sector Mobile Incident Command Center alongside DOI, USEPA, NOAA, USCG, Florida, and Alabama within Unified Command of all assets and response actions.

Technical Expert and Expert Witness: Provided expert testimony for MDEQ and USDOJ for civil and criminal cases involving environmental regulation.

Wireless Communication Commission: Served as MDEQ's representative on the State Wireless Communication Commission to develop and implement wireless communication activities for State and Local Agencies.

Appalachian Regional Coal Commission: Served as State representative on Committee established by Department of Interior, Environmental Protection Agency and Army Corps of Engineers to understand and address the impacts of coal mining in the Appalachian region of the United States.

Mississippi Energy Task Force: Served as MDEQ's representative on gubernatorial established task force to help shape Mississippi's energy policy and growth.

Mississippi Governor's Hazard Mitigation Council: Served as one of MDEQ's members for the development with MEMA for the State's Hazard Mitigation Plan.

Highways and Transportation Task Force: Served as MDEQ representative on legislatively established (2013, Senate Resolution 7) task force to study revenue and expenditures necessary to develop and maintain an adequate highway transportation system in Mississippi.

Lower Mississippi River Conservation Committee (LMRCC): Served on Executive Committee and technical committees of the LMRCC. The LMRCC is a coalition of 12 state natural resource conservation and environmental quality agencies in Arkansas, Kentucky, Louisiana, Mississippi, Missouri and Tennessee. It provides the only regional

forum dedicated to conserving the natural resources of the Mississippi's floodplain and focuses on habitat restoration, long-term conservation planning and nature-based economic development.

Mississippi Pandemic Preparedness and Response Plan: Worked with MEMA and MDOH to develop Mississippi's plan for a pandemic event and specifically on the Critical Infrastructure and Key Resources (CIKR) identification and protections.

CLARKE THOMAS, R.P.G FC&E Engineering, LLC cthomas@fce-engineering.com

Engineering, LLC

Thirty-One Years' Experience

Mr. Thomas has over thirty-one years of environmental consulting, project management, and health, safety and environmental (HSE) compliance experience, including supervision of project engineers and scientists for various projects. Project management experience includes soil and groundwater assessments; remediation projects; Phase I Environmental Site Assessments; regulatory compliance including air, OSHA, NEPA, SPCC, and SWPPP; and interface with multiple regulatory agencies. Mr. Thomas also has response scene management experience including saltwater and crude oil spills in various environments.

Professional Registrations/Affiliations

• Registered Professional Geologist: Mississippi

Education and Training

• B.S. Geology, University of Southern Mississippi, 1984

Employment Record

Senior Associate Geologist FC&E Engineering, LLC, Brandon, Mississippi Present

Duties include managing soil and groundwater assessment and remediation projects; review of Phase I Environmental Site Assessments (ESAs); compliance audits, regulatory compliance assistance including Air, OSHA, NEPA, SPCC, Solid Waste and SWPPP; response management and contractor oversight for oil spills; developing emergency planning documents including SPCC, FRP and Integrated Contingency Plans (ICP).

HSE Compliance Manager

Tellus Operating Group, LLC, Ridgeland, MS

Responsible for compliance with regulatory compliance including the development and management of the HSE Compliance Program for E & P operations that include drilling and workover programs, sweet and sour production (with CO2 EOR), and midstream operations (plants and pipelines) in LA and MS, and International Operations (Colombia S.A).

• Ongoing compliance duties included Air, OSHA, NEPA, SPCC, SWPPP, and Emergency/Incident Response. Implemented monthly tracking/reminder system for HSE and field personnel to maintain ongoing compliance;

Senior Associate Geologist

2011 - 2019

2019 -



P.O. Box 1774 Brandon, MS 39043 Ph: (601) 824-1860 Fax: (601)824-9627

Key Projects

- Management of the Assessment and Remediation of the residual Soil and Groundwater contamination associated with one of the largest land-based crude oil spills in Mississippi history. Project spanned 10+ years and included coordination with numerous State and Federal Agencies. Project was successfully closed with No Further Action.
- Assessment of petroleum contamination at a former bulk fuel facility. Preparation of Corrective Action Plan (CAP), design, and implementation of remediation activities.
- Performed assessment of oilfield site for Louisiana client. Project scope included initial assessment of site, preparation of site closure plan for regulatory agency submittal, and excavation and disposal of contaminated soil.
- Evaluated various potential areas of concern including soil contamination, naturally occurring radioactive materials (NORM), and historic saltwater spills as part of Due Diligence for Acquisition.
- Performed more than 90 Phase I Environmental Site Assessments of various agricultural, commercial, industrial and residential properties in numerous states including Alabama, California, Florida, Tennessee, and Texas.
- Performed field work and prepared SPCC Plans for oil and gas production facilities in several states. Sites included crude oil production and storage facilities ranging in size from small tank batteries to large bulk terminals.
- Provided Due Diligence services for oil and gas fields located in Louisiana, Mississippi and Texas.
- Major clients included Plains All American Pipeline, LP; Hunt Southland Refining, Denbury Onshore, LLC; State of Mississippi Brownfields Program; Federal LUST Program; Morris Petroleum; Mississippi Department of Transportation, and Tellus Operating Group, LLC.



P.O. Box 1774 Brandon, MS 39043 Ph: (601) 824-1860 Fax: (601)824-9627

- Specific HSE Team accomplishments included development of Corporate HSE Manual, H2S Contingency and CO2 Contingency Plans, Corporate Emergency Response Plan, and Facility Response Plan(s). Other significant company accomplishments include a reduction in spill incidents, improvement in relationships with regulatory agencies, expansion of training programs, establishment of written standards for subcontractors and improvement in communication/interaction with field personnel (Incident Reporting, Near Misses, etc.);
- Served as Qualified Individual/Incident Commander, teach Safety Training classes, perform HSE field inspections/internal audits of operations, secure regulatory permits required for construction of wells pads, plants, pipelines, flow lines, etc., and;
- Managed the development of the HSEQ Program for three drill blocks in Colombia S.A. Worked in cooperation with local staff, Bogota HSE staff and partners to successfully shoot 3D Seismic on two blocks and construct and drill one exploratory well.

Senior Geologist/Principal

Earth Consulting Group, LLC, Madison, MS

Responsible for management of the firm (until merger in 2009) including technical oversight, coordination of field activities, and business development. During tenure our firm grew revenue from 350K to 6M annually. We expanded our base of business offerings and added four offices. Earth Consulting Group (EarthCon) merged with Premier Environmental (retained EarthCon name) in 2009. In 2009, transferred to Houston TX and continued in a similar role as Senior Geologist/Principal focusing on Regional Oil & Gas Practice. This role included marketing and development of new business, preparation of proposals, field activity for selected projects, technical report preparation, and interface with regulatory agencies. At EarthCon, Mr. Thomas performed field activity, prepared reports and provided consulting expertise on numerous types of projects including the following:

- Specific tasks included asbestos sampling, field activity for Soil and Groundwater Assessment activities, report preparation/review for Phase I Environmental Site Assessments for Real Estate Transactions, field work/report preparation/review for Phase II Contamination Assessments, preparation of Corrective Action Plans, and preparation of Remedial Action Cost Estimates.
- Additional project experience includes Industrial Compliance, Geological Investigations, Compliance Audits, Landfill Sampling, Soil and Groundwater Assessments for Emergency Response, AST/UST Removal/Investigations, Brownfield Sites, Natural Attenuation, Remediation Design/Implementation.

1995 - 2011



Senior Engineer

RUSSELL C. TWITTY, P.E., BCEE FC&E Engineering, LLC rtwitty@fce-engineering.com

CAREER OVERVIEW

Mr. Twitty has over thirty years of environmental engineering, project management, and compliance enforcement experience, including direct supervision of project engineers and scientists for various projects. Project management experience includes such projects as Incident Command experience with Deepwater Horizon oil spill; developing permit applications for solid waste and hazardous waste treatment, storage and disposal facilities; environmental compliance audits; storm water management; wastewater permitting and compliance; agency negotiations; and financial assurance and closure plans for various operations. Mr. Twitty also has response scene management experience including oil spills, disaster response and assessment.

PROFESSIONAL REGISTRATIONS/AFFILIATIONS

- Professional Engineer: Mississippi
- Board Certified Environmental Engineer American Academy of Environmental Engineers

EDUCATION AND TRAINING

- B.S. Civil Engineering, Mississippi State University, 1986
- M.S. Civil Engineering, Mississippi State University, 1992

EMPLOYMENT RECORD

Senior Engineer

FC&E Engineering, LLC, Brandon, MS

Duties include engineering design and construction oversight of industrial environmental projects including closing lagoons and wastewater treatment systems; response management and contractor oversight for oil spills; developing numerous emergency planning documents including SPCC Plans, RCRA Contingency Plans, Storm Water Pollution Prevention Plans (SWPPP) and Integrated Contingency Plans; developing numerous environmental permit applications including RCRA treatment, storage and disposal (TSD) permits, solid waste permits, mining permits and construction storm water permits; performing inspections for high hazard dams; conducting environmental compliance audits at various facilities; developing sampling and closure plans; conducting sampling activities; and performing environmental site assessments.

Miscellaneous Services Branch Chief; Environmental Compliance and Enforcement Division Hazardous Waste Division Project Engineer; Municipal Wastewater Construction Branch Project Engineer Mississippi Department of Environmental Quality (MDEQ) 1

Mississippi Department of Environmental Quality (MDEQ) 1988 – 2010 Duties included managing staff that was responsible for environmental compliance and enforcement activities for over 2,500 industrial/commercial facilities in Mississippi; serving on the State Emergency Response Team (SERT) for the State of Mississippi.

2010 -

Other duties included developing sampling plans and managing sampling teams who collected numerous groundwater and soil samples in accordance with EPA protocol while serving on the MDEQ Site Investigation Team; and conducting geophysical investigations to locate and recover suspected buried waste.

Highway Design Project Engineer

Mississippi Department of Transportation

1987 - 1988

Duties included designing highways in accordance with the applicable State of Mississippi standards and estimating quantities for budget estimates.

KEY PROJECTS

BP Deepwater Horizon Oil Spill: Served on the Command Staff representing the State of Mississippi during the BP Deepwater Horizon oil spill as an MDEQ employee from May 2010 through June 2010 and as a consultant with FC&E Engineering from July 2010 through February 2011. This required coordinating and negotiating with the United Sates Coast Guard, BP management, the United States Department of the Interior and On Scene Coordinators for the other effected states to ensure the protection of Mississippi's interests.

Closure of Aircraft Painting Facility: Managed the cleanup and closure of an aircraft painting facility. Work involved the initial site assessment, coordination of clean-up contractor, compliance with applicable regulatory requirements, waste transportation and disposal management and follow-up documentation.

Wayne County Oil Spill: Provided engineering services and technical support for the responsible party of an oil flow line release in Wayne County, Mississippi. Engineering services included developing the excavation plan which was approved by the EPA and providing contractor oversight of excavation activities as well as conducting confirmatory sampling.

Engineering Technical Support – Technical support engineer for a large well control event that occurred in a wetland area of the Louisiana Delta. Responsible for design and construction oversight of remediation/recovery features involving: underflow dams, diversion berms, access/haul roads, stockpile and load-out areas.



Senior Engineer/Modeler

BRUCE FERGUSON, P.E., BCEE FC&E Engineering, LLC bferguson@fce-engineering.com

CAREER OVERVIEW

Bruce has twenty-nine years of experience in the environmental field. He worked for the Mississippi Department of Environmental Quality (MDEQ) for twenty-four years before joining FC&E Engineering. While at MDEQ he worked as a staff engineer in the Hazardous Waste Division responsible for writing Resource Conservation and Recovery Act (RCRA) permits and performing compliance inspections at RCRA facilities. Bruce also served a permit writer in the Environmental Permits Division in the Wood and Timber Products Division responsible for writing permits in the Air, Water and Hazardous Waste media programs. He finished his employment at MDEQ as the Branch Manager of the Modeling Branch responsible for the review of air quality modeling submitted in support of Prevention of Significant Deterioration (PSD) air construction permits. Since joining FC&E Engineering, Bruce has provided air quality modeling services for support of new source review (NSR) air construction permit and has prepared air permit applications for submittal under the Title V, PSD and NSR programs. He serves as client manager for a major client in the Wood and Timber Products sector and has provided on-site environmental support to facilities during transition of environmental managers.

PROFESSIONAL REGISTRATIONS/AFFILIATIONS

- Professional Engineer: Mississippi Board of Registration for Professional Engineers and Land Surveyors
- Board Certified Environmental Engineer American Academy of Environmental Engineers

EDUCATION AND TRAINING

- B.S. Petroleum Engineering, Mississippi State University, 1986
- M.S. Environmental Engineering, University of Mississippi 1995

EMPLOYMENT RECORD

Senior Engineer/Modeler

FC&E Engineering, LLC, Brandon, Mississippi

Provide client support for the development of air permit applications submitted under the Title V, Prevention of Significant Deterioration and New Source Review programs. Perform air quality modeling for demonstrating compliance with the Ambient Air Quality Standards.

Modeling Branch Chief, Environmental Permits Division; Hazardous Waste Division Project Engineer; Uncontrolled Sites Project Engineer Mississippi Department of Environmental Quality (MDEQ)

1989-2013

Phone (601) 824-1860 www.fce-engineering.com

2013 -

As Uncontrolled Sites Project Engineer, provided oversight of the cleanup and remediation of uncontrolled hazardous waste sites. Oversight included the review and approval of sampling and analysis plans and site remediation plans. As Hazardous Waste Division Project Engineer, served as permit writer for Resource Conservation and Recovery Act (RCRA) Treatment, Storage and Disposal (TSD) facilities and compliance officer for the inspection of the facilities for compliance. As the Modeling Branch Chief, was responsible for the review and approval of air quality dispersion modeling submitted in support of PSD air construction permit applications.

Served as a member of the MDEQ site investigation team which conducted investigations and environmental sampling in response to reports of unauthorized disposal of hazardous wastes. Served as the lead in geophysical investigations used to substantiate reports of unauthorized disposal of hazardous wastes.

KEY PROJECTS

Environmental Manager – Weyerhaeuser McComb

Served as Environmental Manager for the facility under contract through FC&E during transition of Weyerhaeuser Personnel. Duties included sampling, inspections and reporting required by environmental permits and coverages inclusive of Water Pretreament Permit, Baseline Stormwater Coverage, Construction Stormwater Coverage and Air Title V permit.

Delhi South Field Oil Spill Incident

Determination of basin and sub-basin drainage areas and calculated stormwater runoff volumes of predetermined rainfall events to support the development of a stormwater management plan. Evaluation of runoff control options to contain stormwater and/or divert stormwater around contaminated areas.

Weyerhaeuser NR Company Client Manager

Developed PSD avoidance air permit applications for the Weyerhaeuser Philadelphia and Bruce Mills, PSD air construction application for the Millport Mill and PSD modification application for the McComb Wood Products Facility to support facility modernization efforts.

CF Industries IGAN Expansion Project

Developed PSD avoidance air permit application to support the expansion of the plant to double the production capacity of industrial grade ammonium nitrate.

NSR Modeling Support

Provided modeling support for NSR air permitting in New Mexico at Intrepid Potash Mining facilities and Frontier Field Services natural gas compressor stations and gas processing plants.



CAREER OVERVIEW

- Executive level manager with over twenty years' experience in environmental programs
- Served as MDEQ's NPDES and Pretreatment Wastewater coordinator with **USEPA Region IV.**
- Leadership experience ranging from small teams to directing over 80 staff members
- Developing policy and regulation for MDEQ's programs

Professional Registrations, Affiliations and Certifications

- Professional Engineer Mississippi Board of Licensure for Professional Engineers and Surveyors
- Board Certified Environmental Engineer American Academy of Environmental Engineers
- State of Mississippi, Certified Public Managers Program, CSM designation

EDUCATION AND TRAINING

B.S. Civil Engineering, Mississippi State University, 1991

Employment Record

Chief of Environmental Permits Division Office of Pollution Control (OPC) Mississippi Department of Environmental Quality (MDEQ)

2006 - 2017

Duties include managing a multimedia permitting division composed of 80 staff members (70 engineers) responsible for issuing permits for all the major pollution control programs for the State of Mississippi, including Municipal Solid Waste, Hazardous Solid Waste, NPDES Wastewater & Storm water, Industrial Pretreatment Waste water, Air New Source Construction, and Air Title V Operating permitting programs. Acting MDEQ permitting liaison to the Governor's Environmental Office, the Mississippi Manufacturers Association and the Mississippi Development Authority. Responsible for budget development, recruitment, training, regulation revision, permitting process oversight and conducting public hearings.

Branch Manager

MDEQ, Office of Pollution Control, Timber and Wood Products Permitting Branch 2004 – 2006

Managed permitting staff responsible for issuing permits to commercial and industrial facilities in the timber and wood industry sector in Mississippi. Acted as Mississippi's NPDES waste water coordinator with USEPA Region IV.

Branch Manager

MDEQ, Office of Pollution Control, Service & Misc. Industries Permitting Branch 2000-2004

Managed permitting staff responsible for issuing permits to commercial and industrial facilities in the services industry sector in Mississippi. Acted as Mississippi's Pretreatment waste water coordinator with USEPA Region IV.

Permit Manager/Engineer

MDEQ, Office of Pollution Control, Energy & Transportation Branch 1998-2000

Reviewed permit applications and developed environmentally protective permits in Pretreatment, NPDES, Storm water, and Air pollution medias. Conducted Pretreatment permitting training for the Environmental Permits Division staff.

Pretreatment Permit and Compliance Engineer

MDEQ, Office of Pollution Control, Industrial Pretreatment Section 1991-1997

Developed Pretreatment permits for industries across Mississippi. Conducted Pretreatment permit compliance inspections and audits and summary reports. Drafted enforcement orders and negotiated settlement of violations. Conducted compliant investigations.

Engineering Intern

City of Starkville, Public Works Department, Starkville, Mississippi 1989-1991

Organized sanitary sewer rehabilitation program for the city. Performed infiltration and inflow inspections and reports for sewer collection lines and manholes. Created work logs for sewer rehabilitation crews. Performed surveying for city street improvement projects. Performed traffic studies. Performed city utility map revisions.

Draftsman and Surveyor

Cook Coggin Engineers, Inc., Tupelo, Mississippi 1986-1988

Performed drafting related to topography, dirt work calculations, and engineering design drawings. Performed slope staking, boundary, topography, and highway surveys. Experience with level, transit, and total survey instruments.





Toby M. Cook, P.E. FC&E Engineering, LLC tcook@fce-engineering.com

CAREER OVERVIEW

- Environmental agency branch manager with over thirty years' experience in environmental programs
- Environmental agency experience includes 10 years involvement with the permitting, investigation, remediation and closure of hazardous waste sites statewide
- Twenty years corporate experience in engineering and management functions, with an environmental focus
- Six years experience with environmental consulting firm
- Leadership experience of groups of professionals in both governmental and corporate roles.

PROFESSIONAL REGISTRATIONS, AFFILIATIONS AND CERTIFICATIONS

- Professional Engineer Mississippi Board of Licensure for Professional Engineers and Surveyors
- Board Certified Environmental Engineer American Academy of Environmental Engineers, 1994-2010

EDUCATION AND TRAINING

• B.S. Chemical Engineering, University of Arkansas, 1967

EMPLOYMENT RECORD

Senior Environmental Consultant

FC&E Engineering, LLC, Brandon, Mississippi

2010 -

Duties include developing environmental permit applications including RCRA treatment, storage and disposal (TSD) permits, and air permits; developing sampling and closure plans; performing environmental site assessments, and conducting comprehensive environmental audits.

Branch Manager, MDEQ/OPC Environmental Permits Division, Chemical Manufacturing Branch;

Branch Manager, MDEQ/OPC Hazardous Waste Division, TSD Branch Staff Engineer, MDEQ/OPC Hazardous Waste Division Mississippi Department of Environmental Quality (MDEQ) 1989 – 2010

Experience at MDEQ includes 10 years focused on RCRA Hazardous Waste sites, including permitting, investigation, remediation, and compliance activities. Spent 10+ years focused on environmental permitting, including air water, and hazardous waste permits.

Engineering Research Manager Process Study/Research Engineer Mississippi Chemical Corporation, Yazoo City, Mississippi

As a staff engineer at MCC, investigated and/or tested products, processes and procedures with the objective of improving existing processes or developing new processes to reduce environmental emissions and/or improve product quality and production rate. Participated in the collection and analysis of related environmental samples. As manager of the Engineering Research Department, I supervised professional and hourly staff engaged in various pilot plant operations and plant studies to improve existing products and technology, and develop new products and technology.

EXPERTISE AND RELATED ACTIVITIES

Participated in numerous comprehensive environmental audits at major industrial and healthcare facilities. Experienced in identifying and resolving process related environmental emissions or environmental contamination

Regulatory experience related to the Resource Conservation Recovery Act, Clean Water Act, Clean Air Act, National Environmental Policy Act, Oil Pollution Act and Comprehensive Environmental Responsibility, Compensation and Liability Act.





RUSTY LYONS, P.E., BCEE FC&E Engineering, LLC rlyons@fce-engineering.com

CAREER OVERVIEW

- Over thirty years of environmental engineering experience specifically including wastewater collection and treatment systems.
- Responsible for managing an environmental engineering staff, overseeing compliance and enforcement actions regarding environmental matters, performing compliance inspections, conducting enforcement meetings, and leading in settlement negotiations.
- Wastewater permit renewals/modifications, review of wastewater collection and treatment system plans and specifications, developing and providing technical environmental training and providing onsite technical assistance and troubleshooting at wastewater treatment facilities.
- Project management experience includes wastewater permitting and compliance, wastewater collection and treatment, storm water management, municipal separate storm sewers (MS4), EPA and State enforcement issues, coordination of support for public works during disaster response, wastewater facility closure plans, and categorical pretreatment regulations.

PROFESSIONAL REGISTRATIONS/AFFILIATIONS

- Professional Engineer: Mississippi
- Board Certified Environmental Engineer
- Certified Environmental Trainer
- Certified Pollution Control Operator
- Certified Public Manager
- Mississippi Water Environment Association Past President
- Mississippi Water & Pollution Control Operators' Association

EDUCATION AND TRAINING

• B.S. Agricultural Engineering, Mississippi State University, 1986

EMPLOYMENT RECORD

Senior Environmental Engineer

FC&E Engineering, LLC, Brandon, Mississippi

- Wastewater permitting engineer with experience in wastewater collection and treatment and storm water management.
- Working knowledge of categorical pretreatment regulations and wastewater permit regulations.
- Renewals/modifications for NPDES and Wastewater Pretreatment permits. Performs Regulatory consulting, Sampling and Report development, Construction and Industrial Baseline Storm Water permitting for new developments and for a wide array of clients in fields such as chemical, oil & gas, steel manufacturing, power plants, municipalities, and renewable fuel products facilities.

2013 –

 Provides wastewater treatment and collection system operator training and storm water management training for various facilities and industry or municipal personnel. Consults with clients in wastewater treatment and collection system operations and regulations.

Municipal & Private Facilities Branch Chief, Environmental Compliance and Enforcement Division; Environmental Engineer, Energy and Construction Branch; Environmental Compliance and Enforcement Division Environmental Trainer; Project Engineer, Municipal Permit and Compliance Branch

Mississippi Department of Environmental Quality (MDEQ) 1986 – 2013
 Review of engineering design related to plans and specifications for wastewater

- Review of engineering design related to plans and specifications for wastewate collection and treatment systems,
- Performing compliance inspections of sanitary sewer and treatment systems,
- Conducting enforcement meetings and leading in settlement negotiations related to sanitary sewer overflows/bypasses and treatment facility violations,
- Experience developing and providing technical environmental training and providing onsite technical assistance and troubleshooting at wastewater treatment and collection facilities,
- Project management experience includes wastewater permitting and compliance,
- Storm water management and compliance with municipal separate storm sewers (MS4),
- Coordination of support for public works during disaster response,
- Wastewater facility closure plans.

KEY PROJECTS

Project Manager for FC&E Engineering regarding wastewater collection and treatment facilities for various onsite wastewater collection and treatment systems in Mississippi and Alabama.

Project Manager for FC&E Engineering on wastewater gravity collection line installation, tie-in to City sewer system, and closure of an onsite wastewater treatment two-cell lagoon and spray field disposal system for a Mississippi manufacturing facility. This project involved coordination with the MDEQ, City, Manufacturing facility and Contractor. Work included design plans, closure plans, contractor oversight, coordination of storm water management during construction, and final inspection of the completed system.

Developed regulations, curriculum and certification exams for a Collection Systems Certification for operators of sewer collection systems.

Reviewed and/or developed construction and baseline storm water pollution prevention plans, provided site specific and general permit compliance training, and conduct inspections and provide onsite technical assistance for various municipalities, industries and commercial wastewater systems in Mississippi.



Chad Winter, P.E. FC&E Engineering, LLC <u>CWinter@fce-engineering.com</u>

CAREER OVERVIEW

- Over fifteen years experience in environmental programs
- Multi-sector environmental permitting proficiencies
- Coordination between multiple federal and state agencies
- Ground level role in historic natural and manmade disasters, including the BP Oil Spill, Great Mississippi River Flood of 2011, hurricanes and tornadoes

Project Engineer

PROFESSIONAL REGISTRATIONS, AFFILIATIONS AND CERTIFICATIONS

- Professional Engineer MS Board of Licensure for Professional Engineers & Surveyors
- Certificate of Supervisory Management MS State Personnel Board

EDUCATION AND TRAINING

- B.S. Biological Engineering, Mississippi State Univ., 1998
- Netherlands-America Foundation/Fulbright Fellow, Univ. of Nijmegen, 2001-02
- M.S. Biomedical Engineering, Mississippi State Univ., 2002
- Materials Science & Engineering Certificate, Mississippi State Univ., 2002

EMPLOYMENT RECORD

Project Engineer/North Office Manager

FC&E Engineering, LLC, Starkville, Mississippi

2011 -

Areas of expertise include environmental site assessments; soil and groundwater assessments and remediation activities; underground storage tank compliance; solid waste and hazardous waste treatment, storage and disposal; comprehensive environmental compliance audits; stormwater management plan development & compliance; NPDES wastewater permitting; Air Title V permitting; and multimedia permitting for various educational, institutional, commercial, and industrial operations..

Staff Engineer, MDEQ/OPC Environmental Permits Division

Mississippi Department of Environmental Quality (MDEQ) 2002 – 2011 Project management experience included plans & specifications review for approval of commercial, residential, & municipal wastewater collection & treatment systems; wetlands inspections with multi-state and federal agency coordination; storm water management plan compliance; NPDES wastewater permitting; Clean Air Act compliance and evaluation; and multimedia permitting for biofuel operations.

Other areas of experience included emergency response missions during Hurricane Katrina for disaster debris management, staging, storage, and disposal; biological sampling; & Incident Command structure implementation.

EXPERTISE AND RELATED ACTIVITIES

Senior Engineer related to environmental regulation, risk and management. Areas of expertise include comprehensive environmental regulation, biology, disaster response, site assessments, and air quality and control. Specific interests include site evaluations, oil and gas production operations, and compliance and applicability of the Clean Air Act. Regulatory experience related to the Resource Conservation Recovery Act, Clean Water Act, Clean Air Act, National Environmental Policy Act, Oil Pollution Act and Comprehensive Environmental Responsibility, Compensation and Liability Act.

PROFESSIONAL ACTIVITIES AND COMMITTEES

Mississippi Biomass & Renewable Energy Council: Served on the Board of Directors, 2009-11. MBREC seeks to provide information about biomass resources, research, development, technology, and use. MBREC encourages the use of biomass crops and waste for bio-energy, bio-fuels, and other bio-based products through personal contact with members, education programs, workshops and conferences. MBREC serves as a forum for building public-private partnerships, linking organizations with common goals, and increasing collaborations focused on building bio-based economic development within MS.

Mississippi Chapter of Air & Waste Management Association: Served as State Co-Director, 2008-11.

Mississippi State Univ. Agricultural & Biological Engineering Alumni Advisory Board: The mission of the ABE Advisory Board is to enhance the relationships between the department and alumni and friends. In addition, this Board facilitates more direct involvement by alumni and friends with ABE majors and the university in general. The Board assists the department with internship opportunities, career outlooks, Web page development, newsletters and other communication channels, special event planning (including speaking events on campus and career fairs), student recruiting, faculty recruiting, general development and fundraising, exit interviews and related research, course needs, and other activities.

State Emergency Response Team: Served as MDEQ S.E.R.T. member to assist agency's Emergency Response Branch during natural disaster responses.

Alternative Fuels Liaison: Served as Environmental Permits Division liaison to MDA and innovative alternative fuel industries seeking guidance for environmental compliance for constructing and operating biodiesel, biofuel, and ethanol manufacturing facilities.

Instructor for Ashford University: Delivery of online instruction to students of the guidelines set by the National Environmental Policy Act (NEPA) and its subsequent modifications, and the fundamental methods of analysis required for conducting a robust Environment Impact Statement (EIS). Students learn the fundamental elements of an EIS through the examination of contemporary cases via a 5-week course.



Project Engineer

Charles Cook, P.E. FC&E Engineering, LLC ccook@fce-engineering.com

CAREER OVERVIEW

- Engineer with over ten years experience in the environmental consulting field
- Oversite experience in the remediation of petroleum spills including pipe leaks, loading spills, and leaking underground tanks
- Inspection and assessment of asbestos in industrial buildings and residences prior to renovations and demolitions activities
- Performed Phase I Environmental Site Assessments
- Site Inspection and Recommendation of Construction Storm Water Best Management Practices
- Prepared Large and Small Construction Storm Water Pollution Prevention Plans
- Experience with sampling a variety of matrixes including wastewater, storm water, soil, and groundwater in accordance with EPA quality assurance and quality control techniques

PROFESSIONAL REGISTRATIONS, AFFILIATIONS AND CERTIFICATIONS

- Professional Engineer Mississippi Board of Licensure for Professional Engineers and Surveyors
- MDEQ Certified Asbestos Management Planner
- MDEQ Certified Asbestos Inspector
- MDEQ Certified Lead Based Paint Inspector

EDUCATION AND TRAINING

- B.S. Mechanical Engineering, Mississippi State University, 2007
- General safety orientation program 8 hour
- OSHA Hazardous Waste Operations and Emergency Response -
- MSHA Mine Safety Training

EMPLOYMENT RECORD

Project Engineer FC&E Engineering, LLC, Brandon, Mississippi

2007 -

Comprehensive permitting engineer with extensive experience in wastewater sampling and permitting, chemical spill cleanup and remediation projects, spill prevention control and countermeasures plans, facility response plans, air permitting and compliance, industrial storm water permitting, construction storm water permitting, inspection and recommendation of construction storm water best management practices, design and permitting of waste water treatment systems, construction oversite of engineered design projects, AutoCAD drafting, toxic release inventory reporting, tier two reporting, asbestos inspection and assessment, environmental site assessments, regulatory consulting for a wide array of clients in fields such as concrete industry, general construction, hospitals, chemical, oil & gas, steel manufacturing, power plants, municipalities, and renewable fuel products facilities.

KEY PROJECTS

Environmental Manager – Weyerhaeuser Holden: Served as Environmental Manager for the facility under contract through FC&E during transition of Weyerhaeuser Personnel. Duties included sampling, inspections and reporting required by environmental permits and coverages inclusive of Water NPDES Permit, Baseline Storm Water Coverage, and Air Title V permit.

Construction Storm Water Inspector: Perform weekly construction storm water inspections at the University of MS Medical Center in Jackson, MS from 2013 to Current. Tasks include performing weekly inspections and providing contractors with recommendations in dealing with erosion and sediment control issues involving roadway, utility, and building construction.

Large Construction Storm Water Plan Preparation: Developed a large construction storm water pollution prevention plan and best management practices for the construction of a 6-acre spray irrigation field. Provided engineering oversight to the associated project during construction and developed as built drawings.

Asbestos Inspection and Assessment: Performed an asbestos inspection and assessment of houses constructed prior to 1980. Collected samples, transported the samples to an accredited laboratory, reviewed the analytical results, prepared a detailed report that included the location and quantities of asbestos containing building materials, and assisted the client with preparation and submittal of the MDEQ 10 day demolition and renovation form.

Leaking Underground Storage Tank Remediation: Provided engineering support in locating the source of the diesel fuel leak, made recommendations on tank removal and taking the associated piping out of service, provided construction oversite during tank removal and contaminated soil excavation, performed soil sampling, compared soil sample results to MDEQ's target remediation goals, and prepared a report documenting the event.

Phase I Environmental Site Assessment: Performed phase I environmental site assessment on an existing asphalt plant site. The site had many recognized environmental conditions including: petroleum spills, brown field restrictive covenants, and in adequate structural controls that may have led to soil or groundwater contamination. A detailed report was prepared that include findings, EDR reports, and recommendations. A phase II was performed by FC&E and the MDEQ revoked the restrictive covenants from the site after groundwater sampling and MDEQ correspondence.





Charles O. M. Peel, R.P.G. FC&E Engineering, LLC cpeel@fce-engineering.com

Career Overview

- Geologist with over twenty-five years of experience in managing projects related to oil & gas production and refining, environmental due diligence, Brownfields redevelopment, hazardous waste, environmental compliance, soil and groundwater investigation, delineation and remediation, environmental construction oversight, emergency response, litigation support, and petroleum contamination.
- Completed projects with a variety of clients, including lending institutions, developers, petroleum companies, manufacturers, government agencies, transportation industry, agricultural industry, pulp and paper industry and other commercial clients.
- Worked on and/or managed environmental projects with regulatory programs in Mississippi, Louisiana, Alabama, Arkansas, Tennessee, Massachusetts, Minnesota, New York, and New Jersey.

Professional Registrations, Affiliations and Certifications

- Mississippi Registered Professional Geologist
- Tennessee Professional Geologist
- Kentucky Professional Geologist
- 40 Hour OSHA HAZWOPER and 8-hour updates
- 8 Hour OSHA Manager Training
- OSHA Confined Space Entry
- 8-Hour MDEQ Environmental Sampling Training
- EnSys Field Method Certification Training
- Spill Prevention, Control & Countermeasure (SPCC) Course
- EPA/AHERA Asbestos Inspection and Assessment Course

EDUCATION AND TRAINING

- B.S. Geology, Millsaps College, 1984
- Graduate Studies, Geology, University of Southern Mississippi, 1984-1985

Employment Record		
Senior Geologist		
FC&E Engineering, LLC, Brandon, MS	2016 –	
EarthCon Consultants, Inc., Madison, MS	2012 - 2016	
Peel Consulting, PLLC, Madison, MS	2001 - 2012	
Encote Inc. 260 Towns Contor Plyd. Bidgsland, MC	1999 - 2001	
Ensafe Inc; 360 Towne Center Blvd, Ridgeland, MS	1999 - 2001	
Eco Systems, Inc.; 4294 Lakeland Drive, Flowood, MS	1996 - 1999	
	Phone (601) 824-1860	

Ferguson Harbour, Inc., 4110 Highway 80 East, Pearl, MS	1993 - 1996
First Environment, Inc.; 119 Marketridge Drive, Jackson, MS	1989 - 1993
Mississippi Bureau of Geology; P.O. Box 20307, Jackson, MS	1987 - 1989
TXO Production Corp.; 401 Edwards St., Shreveport, LA	1986 - 1987

Key Projects

Remediation System Operation / Project Manager / Petroleum Facility / MS

Provide project management for operation and maintenance of soil and groundwater remediation systems. Oversee technical personnel, monitor system performance, and report to state regulatory programs. Provide recommendations for system operation and system modifications to maximize contaminant recovery.

Onsite Project Representative/Project Manager / Transformer Mfg Facility/ MS

Client representative and oversight of all onsite and offsite investigation, delineation, and remediation of migration of contaminants (soils and groundwater) and oversight and implementation of Remedial Action Plan approved by the Mississippi Department of Environmental Quality Bureau Pollution Control and the U. S. Environmental Protection Agency, Region IV. Responsibilities included acting as liaison between all public and private entities involved including management of the active manufacturing facility, local government, contractors, onsite laboratory, owners of all impacted properties and litigation and defense attorneys involved with the project for approximately ten years in duration with remediation and investigation ongoing simultaneously.

Onsite Project Representative/Project Manager / Pulp and Paper Facility/ MS

Onsite project representative for remedial construction project for pulp and paper facility offsite property in Mississippi. Project oversight and implementation of Remedial Action Pan approved by Mississippi Department of Environmental Quality, Bureau of Pollution Control. Project construction over sight included a RCRA-type high performance cap, extensive earthwork, bentonite slurry wall hydraulic barrier, a groundwater extraction system, and groundwater storage and truck loading facility. Construction also included site access roads, a relocated county –owned road and landfill, and relocation of water, power, and phone utilities.

Project Manager/Environmental Emergency Response/ MS, TN, LA, AL

Project manager on several hundred divers projects from conception to final closure involving the release of hazardous materials to the environment. Supervised and managed site operations and remediation on emergency responses as well as planned remediation projects involving diverse industries including trucking, railroad, bulk fuel distribution terminals, Air National Guard facilities, pulp and paper, etc. Responsibilities included performing full site investigations and remediation, preparation of Work Plans, Cost Plans, Site Health and Safety Plans, Transportation and Disposal Plans, Remediation Plans as well as serving as liaison to various regulatory organizations.



Wayne Stover, R.P.G. FC&E Engineering, LLC wstover@fce-engineering.com

Senior Geologist

CAREER OVERVIEW

- Over twenty-five years' experience in environmental programs
- Leadership experience ranging from small teams to functional supervision of technical staff
- Experience working with multiple State, Local and Federal agencies
- Project management of RCRA TSD facilities including compliance, permitting and groundwater remediation
- Leadership roles in historic natural and manmade disasters, including the BP Oil Spill, , hurricanes and tornadoes
- Investigation, Remediation and Closure of contaminated sites though out Mississippi

PROFESSIONAL REGISTRATIONS, AFFILIATIONS AND CERTIFICATIONS

 Professional Geologist – Mississippi State Board of Registered Professional Geologist

EDUCATION AND TRAINING

- B.S. Geology, Mississippi State University, 1985
- M.S. Engineering Science Geological Engineering, University of Mississippi, 1993

EMPLOYMENT RECORD

Senior Geologist

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FC&E Engineering, LLC, Brandon, Mississippi

Primary duties include conducting Phase I and Phase II Environmental Site Assessments, Environmental Regulations Compliance Assistance, Solid Waste Permitting, Project Management, Sample Analysis Plan Development, Development of Storm Water Permits.

Geologist III, MDEQ Office of Pollution Control (OPC) Environmental Compliance Enforcement Branch (ECED);

Scientist IV, MDEQ/OPC Hazardous Waste Division Scientist III, MDEQ Office of Geology

Mississippi Department of Environmental Quality (MDEQ) 1986 – 2015

Primary duties as a Geologist III duties included environmental compliance and enforcement of Air (Title V), Water (Pretreatment, NPDES, Storm Water), and Hazardous Waste Generator facilities. Before that served as an Environmental Scientist IV in the Hazardous Waste Division and prior as a Scientist IV with the Office of Geology. Additional duties as a member of the Sampling Team, were to determine water and soil quality at selected sites; Member of SERT, State Emergency Response

Team. Duties included responding to environmental emergencies and assessing environmental impact.

EXPERTISE AND RELATED ACTIVITIES

Senior Geologist with experience related to environmental regulation, risk and management. Areas of expertise include field geology; geophysical assessment; soil, surface water and groundwater sampling; environmental site assessments; remedial over sight; emergency response; environmental permit writing. Regulatory experience related to the Resource Conservation Recovery Act, Clean Water Act, Clean Air Act, National Environmental Policy Act, Oil Pollution Act and Comprehensive Environmental Responsibility, Compensation and Liability Act.

PROFESSIONAL ACTIVITIES AND COMMITTEES

BP Deepwater Horizon Oil Spill: Served as the State On Scene Coordinator (SOSC) representing the State of Mississippi during the BP Deepwater Horizon oil spill. Served under the MDEQ Executive Director and Governor as Mississippi IC at the Sector Mobile Incident Command Center and alongside DOI, USEPA, NOAA, USCG, Florida, and Alabama within Unified Command of all assets and response actions.



Project Manager

C. Patrick Edgens, Jr. FC&E Engineering, LLC PEdgens@fce-engineering.com

CAREER OVERVIEW

- Project level manager with over twenty years' experience in environmental programs
- Over fifteen years of experience managing projects
- Management of project budgets ranging from a few thousand to several million dollars
- Assisted numerous clients with resolution of various environmental regulatory matters

PROFESSIONAL REGISTRATIONS, AFFILIATIONS AND CERTIFICATIONS

- American Institute of Chemical Engineers
- Mississippi Chapter of Air & Waste Management Association

EDUCATION AND TRAINING

- B.S. Chemical Engineering, Mississippi State University, 1992
- Storm Water Management
- Storm Water Qualified Credentialed Inspector
- Certified in Visible Emission Evaluation
- Emergency Hazardous Material Response
- Hazardous Material Handling Certification
- Hazardous Material Level 1 Technician
- Hazardous Waste Management
- HAZWOPER
- HAZCOM
- ISO 14001 Internal Environmental Management
- EPA Air Pollution Control Courses

EMPLOYMENT RECORD

Project Manager/Sr. Environmental Specialist FC&E Engineering, LLC, Brandon, Mississippi

2014 –

Mr. Edgens has prepared applications for Title V and Synthetic Minor Operating Permits for major air pollution sources in numerous States for a range of industrial clients. Mr. Edgens performs duties project manager for various clients as а in industrial/commercial sectors and related pollution media. Mr. Edgens performs numerous tasks ranging from instruction and consultation of client personnel in environmental matters, facility inspections, and obtaining and managing appropriate permits. Mr. Edgens also develops various documents for environmental management purposes for an array of matters to satisfy client needs.

Project Engineer

Thompson Engineering, Inc. Ridgeland, MS

Mr. Edgens performed regulatory compliance audits, field investigations (including collection of air, soil, groundwater and surface water samples), as well as, performance of environmental site assessments for private, commercial and industrial properties. Experienced in a wide range of environmental programs involving permitting and compliance issues includes coordination and negotiation with environmental regulatory agencies. Mr. Edgens managed duties involving RCRA and Clean Water Act activities.

RCRA Program Manager

Mission Assurance, Stennis Space Center, MS

Provided technical support to the National Aeronautic and Space Administration's Test Propulsion Program regarding hazardous material, hazardous waste, and solid waste. Performed internal audits for facility-wide compliance and ISO 14001 certification. Developed and implemented various programs to reduce potential for pollution within the Environmental Management System.

E.I.T

Mississippi Department of Environmental Quality (MDEQ), Jackson, MS 1993-2000

Employed by Air Quality Management Section performing and analyzing results from air pollution dispersion models. Extensive work in the Title V Section reviewing applications and preparing Title V Operating Permits and Synthetic Minor Operating Permits for major air pollution sources.

PROFESSIONAL ACTIVITIES & KEY PROJECTS

Mississippi Department of Transportation (MDOT), Environmental Division, Environmental Stewardship and Compliance Program, Storm Water Inspections – Mr. Edgens is a Storm Water Qualified Credentialed Inspector and served as a Routine Storm Water Inspector and a Storm Water Trainer as part of MDOT's Comprehensive Environmental Compliance Program. Mr. Edgens is a Storm Water Qualified Credentialed Inspector. In addition to these duties, Mr. Edgens reviewed Storm Water Pollution Prevention Plans and Erosion Control Plans for completeness and implementation to specific projects. Mr. Edgens, additionally, regularly attended preconstruction meetings to provide support to contractors and MDOT personnel regarding site specific conditions or requirements.

Mississippi Department of Transportation (MDOT), Construction Division, Storm Water Inspections – Mr. Edgens served as a storm water inspector for the preliminary storm water field inspections that were made on a limited number of MDOT construction projects. The purpose of the field inspections was to evaluate compliance status and best management practice implementations.

Mississippi Department of Transportation (MDOT) Maintenance Division, Statewide - Mr. Edgens helped conduct the Storm Water Management Training Program for classes that were trained in 2004 and 2010. The training program included general training in storm water concepts, the MS4 Storm Water Permit requirements, and the requirements of MDOT's Storm Water Management Plan.

2004-2014

Mississippi Department of Transportation (MDOT), Maintenance Division, Environmental Auditor – Mr. Edgens performed environmental site inspections, drafted reports of findings, worked to develop Standard Operating Procedures, drafted SPCC and SWPP Plans, and reviewed systems for MSDS management systems, assisted in developing Environmental Awareness training guidance manuals and trained supervisory staff. Mr. Edgens also worked with MDOT and MDEQ to address potential air permitting issues concerning several MDOT Maintenance facilities.

Mississippi Department of Transportation (MDOT) District 6, Management of Debris Removal – Following Hurricane Katrina, Mr. Edgens served as Field Manager, responsible for all aspects of field work during roadside debris removal within the eight counties, state-maintained system of District 6.

Sr. Construction Manager



Steve Mangum FC&E Engineering, LLC smangum@fce-engineering.com

CAREER OVERVIEW

- Program/project level manager with over thirty years' experience in the environmental industry
- Leadership experience ranging from small teams to managing a workforce in excess of 400
- Management of annual project budgets in excess of \$10 million
- Contractors lead on historic natural and manmade disaster projects, including the BP Oil Spill, hurricane Katrina, and numerous pipeline and highway/rail transportation incidents
- Program/project manager for USEPA Region IV and MDEQ emergency response contracts
- Remediation and Closure of contaminated sites though out the southeast

EDUCATION AND TRAINING

- Hinds Community College, 1977
- OSHA 40-Hour Hazwoper Training
- MSHA 24-Hour New Miner Training
- UST Certification: Mississippi 1990-1998, Arkansas 1990-1996, Louisiana 1991-1997
- DOT 49 CFR 172.700 Compliance Training
- Hazardous Waste & Safety Regulations for UST Closures
- 8-Hour Environmental Sampling Protocol
- NIMS IS-00100, 00200, 00700, & A.00800
- Ethical Decision Making
- **Project Management Essentials**

EMPLOYMENT RECORD

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Sr. Construction Manager/Estimator

FC&E Engineering, LLC, Brandon, Mississippi

Construction manager in charge of FC&E oversight of all contractor installations on various environmental and civil engineering projects. Responsible for maintaining adherence with approved plans and specifications and permit conditions, reviewing job submittals, contractor payments, change orders, and ensuring construction schedules are maintained. Installations have included wastewater pump stations, wastewater treatment systems, force main, gravity sewer lines, gravel absorption beds, land clearing and grubbing, storm water erosion protection, placement of rip rap for slope and shoreline protection, ensuring best management practices, performing inspections and recommendations, spill containment and flow diversion installations.

Corporate Estimator/Sr. Project Manager

United States Environmental Services, Jackson, MS

Developed bidding and estimating procedures implemented across the company and designed a bidding/estimating training program required for all Supervisors and Project

2014 -

Managers. Consulted with Divisions on larger response projects, specifically those involving soil remediation and heavy equipment.

MS Barrier Island Supervisor/National Park Service Liaison Swift Worldwide Resources, MS Gulf Coast;

Operations Supervisor/Liaison to the National Park Service for the Mississippi Barrier Islands representing BP on the Deepwater Horizon incident. Responsible for management/oversight of all operational aspects of removing oil/tar balls from 85 linear miles of Mississippi Barrier Island shoreline.

Sr. Project Manager

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CMC, Inc., Nicholasville, KY

Successfully participated in the writing and development of a proposal that resulted in a 7 year, \$134M contract for the US Environmental Protection Agency, Region IV. Directly responsible for and managed all aspects of over \$31M of environmental superfund projects from May, 2006 to June 2010.

Vice President of Operations/Southern Regional Manager/Division Manager Ferguson Harbour Inc., Jackson, MS 1991 - 2006

Responsible for the management of all commercial, state, and federal operations covering 30 states in the eastern half of the US. Also the Point of Contact (POC) for the US EPA Region IV ERRS contract. Built/customized programs with multifaceted companies to provide industrial maintenance, remediation, and emergency response services on a daily and "will-call" basis.

Operations Manager/Site Supervisor,

Riedel Peterson Environmental Services, Jackson, MS 1985 - 1991 Ops Manager/Site Supervisor responsible for responding to all types of emergency response incidents ranging from truck incidents and train derailments to pipeline ruptures and tank failures. Response manager for US EPA Region VI performing emergency removal projects in LA, ARK, and OK.

EXPERTISE AND RELATED ACTIVITIES

Senior Project Manager in the environmental industry with wide-ranging training and skill in hazmat emergency response, including transportation (highway and rail) accidents, oil spills, remediation, demolition, and UST projects. Areas of expertise include project development/management, contract review/negotiations, construction management, erosion protection, all types of heavy equipment use, proposal and work plan development, health and safety plans, and maintaining project schedules/budgets.

PROFESSIONAL ACTIVITIES AND COMMITTEES

Project Manager/Site Health and Safety Officer - US EPA Region IV Project: Responsible for management of all daily operations and health and safety for a project that received 2 awards from the USACE for an excellent safety record (2 1/2 years and over 250,000 man hours without a single lost time/recordable incident). Excavated over 548,000 cy's of Dioxin, PCP, and naphthalene contaminated soil, constructed a 19 acre

2006 - 2010

Phone (601) 824-1860 www.fce-engineering.com

60 mil HDPE lined containment cell onsite, placed contaminated soil in the cell, and stabilized 125,000 tons of principle threat soils w/6 - 8% Portland cement using a Pug-mill system. Stabilized soil was compacted in a "waffle" shape to facilitate cap drainage design.

Program/Project Manager – Mississippi Department of Environmental Quality (MDEQ) Emergency Response contract: Directly responsible for overall management of all aspects of the MDEQ Emergency Response contract. Evaluated information received, such as MSDS's and other site-specific data, for initial emergency response actions to high-hazard responses all across the State of Mississippi. Coordinated with the client's technical representatives and developed response actions and field screening procedures to establish proper health and safety procedures for the response team. Developed Work, Site Health and Safety, Disposal, and Site Erosion Control plans for a very diverse set of project site conditions. Routinely coordinated highway response actions with various state agencies including the MHP and MDOT.

Staff Environmental Engineer



JEREMY B. SMITH FC&E Engineering, LLC jsmith@fce-engineering.com

Mr. Smith is a biological engineer with environmental experience including managing an environmental engineering staff, collecting field data for wetland delineations of oil and gas field construction activities, overseeing compliance and enforcement actions regarding environmental matters, and performing compliance inspections. Experience also includes preparing Stormwater Pollution Prevention Plans and obtaining all related permits. Mr. Smith is well versed in wetland assessment, permitting, USF&W and Corps of Engineers regulatory requirements.

EDUCATION AND TRAINING

• B.S., Biological Engineering, Mississippi State University, 2009

EMPLOYMENT RECORD

Staff Environmental Engineer

FC&E Engineering, LLC, Brandon, Mississippi

Mr. Smith has performed numerous wetland delineations, jurisdictional determination requests, and Corps of Engineers (COE) permitting projects since joining FC&E. Mr. Smith is an effective water quality and wetland permit engineer that is comfortable negotiating with COE and other agencies on permit conditions, mitigation plans, revisions and other agency matters. He has performed water and soil sampling, wastewater permit application preparation for NPDES permits, GIS mapping for impacted area delineations, environmental site assessments (Phase I, II, and III), natural resource damage assessments, oil spill response engineering support, Arc-GIS interactive figures and aerials for modeling and report illustrations.

Environmental Manager and Draftsman

Messinger & Associates Inc., Bastrop, Louisiana

Performed numerous wetland delineations, jurisdictional determination requests, and Corps of Engineers (COE) permitting projects for oil and gas exploration. Performed water sampling and prepared wastewater permit application for NDPES permits. Provided compliance oversight for best management practices to be utilized during projects. Provided drafting services, utilizing AutoCAD Civil 3D, for land surveying of oil and gas fields and pipelines.

Lab Assistant

MSU Forestry Products Department, Starkville, Mississippi 2008-2009

Provided lab assistance in an analytical chemistry lab utilizing numerous techniques to characterize renewable bio-fuels.

Field Assistant

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MSU Plant and Soil Science Department, Starkville, Mississippi 2007-2008

Provided field and lab assistance in the research and planting of alternative crops to be utilized for renewable bio-fuels.

2013 –

JEREMY B. SMITH - Staff Environmental Engineer

(continued)

KEY PROJECTS

Pike BioEnergy – Renewable Energy Facility (180 Acre site) in Pike County, MS

Performed Phase I ESA for the site. Performed wetland delineation on the entire site and applied for appropriate wetland permit after consultation with the USACE district office. Assisted the client with proposing wetland mitigation options to the USACE as part of the permit application. Consulted with USFWS and MDWFP regarding threatened and endangered species on the site. Consulted with MDAH regarding cultural resources on the site.

Amite BioEnergy – Renewable Energy Facility (80 Acre site) in Amite County, MS

Compiled wetland permit application for submittal to the USACE district office. Assisted the client with proposing wetland mitigation options to the USACE and put together a Permittee Responsible Mitigation plan. Provide ongoing oversight and reporting for the mitigation site.

<u>NEJD Pipeline – CO2 Pipeline (35 Miles) in Rankin, Simpson, and Copiah</u> <u>Counties, MS</u>

Performed wetland delineation on the 35 mile pipeline right of way and applied for appropriate wetland permit with the USACE district office. Consulted with USFWS and MDWFP regarding threatened and endangered species on the right of way. Consulted with MDAH regarding cultural resources on the right of way. Submitted permit applications and collected water samples for MDEQ regulated activities.

<u>Amite County – Solid Waste Transfer Station and Class II Rubbish Landfill Site</u> (25 acres) Gloster, MS

Performed Phase I ESA for the site. Performed wetland delineation on the entire site and applied for appropriate wetland permit after consultation with the USACE district office. Assisted the client with proposing wetland mitigation options to the USACE as part of the permit application. Consulted with USFWS and MDWFP regarding threatened and endangered species on the site. Consulted with MDAH regarding cultural resources on the site.

<u>Moon-Hines-Tigrett Eucutta Flowline Spill – Oil Release from pipeline failure in</u> <u>Wayne County, MS</u>

Provided engineering support services for emergency response operations. Services included developing response plans, O&M plans, rainfall contingency plans, collecting GIS data with field reconnaissance, and creating GIS maps and files. Project required daily coordination with MDEQ, Coast Guard, Oil & Gas Board, and USEPA officials.

<u>Delhi Field – Enhanced Oil Recovery Field (10,000 Acres) in Richland, Franklin, and Madison Counties, LA</u>

Performed wetland delineations and applied for wetland permits over 5 year period for multi-phased developments within the oil field unit. The unitized field encompasses a

surface area of nearly 10,000 acres with well pads, pipelines, and central facilities. Consulted with LDEQ regarding water sampling requirements and collected required water samples. Consulted with Louisiana SHPO regarding cultural resources within the field unit. Provided emergency response services associated with spill events and cleanup efforts. Emergency response services included wetland delineations and USACE consultations, wildlife impact assessments for preliminary National Resource Damage Assessment (NRDA), collection of GIS data with field reconnaissance, creation of GIS maps and files, and engineering oversight for water management.

Experienced with Trimble GPS equipment, ArcGIS software, and AutoCAD. Experienced with water and soil sampling techniques. Experienced with state and federal agency coordination.



Peter Virden FC&E Engineering, LLC pvirden@fce-engineering.com

Senior Environmental Manager St. Louis, Missouri

Thirty Years Experience

With thirty years of experience, Mr. Virden is an accomplished environmental manager adept at leading, organizing, and implementing business environmental results through environmental management systems, people, and sustainable practices. Mr. Virden has demonstrated success in developing and executing efficient procedures and practices, reputation sensitive goals, cost-effective compliance solutions, and improvement oriented auditing. He is proven an efficient, organized leader delivering results that align with business strategies and process enhancements.

EDUCATION AND LICENSES

- Louisiana Bar Association, 1996
- JD, Loyola University, New Orleans, LA
- MS, Chemical Engineering, Mississippi State University, Starkville, MS
- BS, Petroleum Engineering, Mississippi State University, Starkville, MS

EMPLOYMENT RECORD Senior Environmental Manager FC&E Engineering, LLC

2014 –

Provide comprehensive environmental services to 50+ clients in various industry sectors including healthcare, fertilizer, mining, power plants, universities, prisons, wood products, agriculture and biofuels. Services in all media; air, water, soil, remediation and activities, including management systems, permitting, compliance, enforcement, planning and reporting.

- Enhanced relationship with environmental agencies, harmonized systems across facilities and reduced costs to diverse and overlapping systems, by developing and implementing Environmental Management System (EMS) for healthcare industry client.
- Performed environmental compliance auditing for multiple healthcare industry clients, identifying compliance gaps and recommending a course of corrective and preventive action, reducing potential agency notices of violation and fines and improving business operations risks.
- Developed compliance management system, tracking large number of permits, regulatory requirements and closures, and providing multi-media support services that improved and maintained freedom to operate for potash mining client.
- Improved business operations risk through air permit compliance support and management systems for agriculture industry client. Developed flexible and representative permit limits, requested variance and long term permit application for more operational adaptability.

Monsanto Company

Corporate Environmental Manager

Provided comprehensive environmental services for global company operating in over 60 countries, including large chemical manufacturing, seed production, and research associated facilities. Services in all media; air, water, soil, remediation and activities, including management systems, permitting, compliance, enforcement, planning and reporting.

- Simplified complex permit terms to operational language and provided tools to meet requirements, by developing facility air permit compliance plans that protected freedom to operate and reduced business operation risks.
- Utilized newly available SPCC template plan at all eligible facilities, through specialized support services in water issues, air permitting and SPCC, saving several thousand dollars over PE certified long plan per facility.
- Drove continuous operational improvement and provided corporate governance through high-quality Environmental Safety and Occupational Medicine auditing performance, improving business operations risks.
- Managed outside processors, sustainability / eco-efficiency and climate change programs, reducing increased future liability of third party use and improving internal business operations.
- Improved business operational efficiency and risk through ESM Management System development and implementation, achieving consistency and harmonization across multiple locations, reducing compliance risk and systems costs.
- Efficiently and cost-effectively managed approximately 10 remediation sites, ranging from small to large complex sites, in all stages of remediation process, assessment, investigation, evaluation, remedy design and operation, and long term monitoring and maintenance.

Plant Environmental Engineer, Luling, LA 1995 – 1999 Provided select environmental services, protecting business operations freedom to operate, improving operational efficiency, and reducing compliance risk, including management of solid and hazardous waste program, remediation projects, and special compliance programs, such as the EPA Risk Management Program (RMP).

URS CONSULTANTS, New Orleans, LA

Environmental Engineer

Performed comprehensive environmental services providing freedom to operate and reducing business operations risk for various business and industry clients, including chemical and petroleum plants, EPA Superfund removal and remediation sites, and civil infrastructure projects. Services included air permitting, compliance support, remediation plan development and implementation, and environmental surveys.

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY, Jackson, MS

Environmental Engineer

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1995 – 2014

Provided staff program management services for the State Environmental Agency, protecting state natural resources and providing reasonable and competitive regulatory platform for businesses operating in the state. Specific programs included state uncontrolled sites, RCRA regulated sites, commercial hazardous waste management facilities, and state led Superfund PA/SI program.

KEY PROJECTS, PROGRAMS & SYSTEMS

- Performed comprehensive ESHOM audits and inspections at a large variety pf industry sectors and associated facilities, over the course of entire career, with focus on the environmental space.
- Performed numerous Phase I Environmental Site Assessments for several clients, purposes and types of properties, identifying potential liability issues and recommendation to address them.
- Managed multiple, from complex to simple, multi-media remediation projects, including an international site with significant environmental impacts and circumstances.
- Developed and implemented environmental systems for clients according to international standards, and significantly adapting to already-in-place systems and procedures.
- Manages intra-company programs for various specialty purposes including 3rd party liability, emerging regulatory issues and freedom-to-operate.