AREAS OF EXPERTISE

Site Investigation/ Assessment

Environmental Compliance

Waste Treatment and Management

Water and Wastewater Treatment

Permitting / Compliance

EDUCATION

B.S. Civil Engineering, Louisiana State University, 1968

M.S., Environmental Engineering, Tulane University, 1970

Doctor of Engineering, Environmental Engineering, Tulane University, 1972

PROFESSIONAL HISTORY

Louisiana Department of Health, Public Health Engineer, 1967-68

Louisiana Department of Health / Air Control Commission, Air Control Engineer, 1970

Walk, Haydel & Associates, Inc. (New Orleans), Environmental Engineer, 1972-1999

URS Corporation, Inc.

REPRESENTATIVE EXPERIENCE

Dr. Haney has over thirty-six years of experience in environmental engineering engaged in projects for government, utilities, oil and gas processing, transportation and production facilities, refining and petrochemical industries and commercial facilities. Has extensive project management and design experience in air, water and hazardous waste activities for commercial, industrial, and governmental clients.

Experience in regulatory activities includes air, solid and hazardous waste and water discharge permits, development of ambient air projections, waste water characterizations and management, stormwater and spill management planning, environmental assessments, remedial investigations and feasibility studies, risk assessments, environmental compliance evaluations and environmental assessments.

Air Emissions Compliance and Permitting

- Prevention of Significant Deterioration permit application development for a 300 MMCFD natural gas processing plant, Mobile Oil Exploration & Producing Southeast, Inc.'s Magnolia Gas Plant.
- Ambient air impact evaluation of Texaco USA's Paradis Field CO_2 Extraction Unit.
- Environmental and regulatory evaluation, permit application development and regulatory agency liaison for Placid Oil Company's Waller County Natural Gas CO_2 Extraction Unit.
- Preconstruction permit application development and regulatory liaison for a 25,000 BPD gas separation plant in Chambers County, Texas.
- Prevention of Significant Deterioration permit application development and regulatory follow up for a 10,000-BPD crude and condensate topping unit addition to an existing gas processing plant in Natchitoches Parish, Louisiana.
- Hydrogen sulfide ambient air impact analysis of Superior Oil Company's Kaplan Gas Processing Plant.
- Environmental Assessment for Kiantone Pipeline Company's 100 mile pipeline through the Allegheny

(New Orleans),
Environmental Engineer,
1999 – Present

AFFILIATIONS

Louisiana Water Pollution Control Association - Past President

Water Environment Federation

Louisiana Engineering Society

National Society of Professional Engineers

PROFESSIONAL REGISTRATIONS

Registered Professional Civil Engineer, Louisiana

Register Professional Environmental Engineer, Louisiana

National Forest.

- Environmental regulatory review and permit application development for Shell Oil Company's 150 MMCFD Jackson Dome CO_2 Production Facility in Rankin County, Mississippi.
- Air permit application development, regulatory review and agency liaison for modifications to Cal Gas Corporation's Beacon Gas Processing Plant in Minden, Louisiana.
- Air emission and water discharge permit application development and agency liaison for 15,000-BPD crude oil storage and pumping station near Boyce, Louisiana.
- Prevention of Significant Deterioration permit application regulatory and control technology review for Shell's 8,200 BPD tertiary oil recovery facility using CO_2 in Pike County, Mississippi.
- Regulatory compliance review and air emission inventory development for Placid Oil's 193 MMCFD and 600 MMCFD natural gas processing plants in St. Mary Parish, Louisiana.
- Air emission projection, regulatory compliance review and permit application development for Placid Oil's 10 CFPD natural gas CO_2 and H_2S extraction unit at Bovina, Mississippi.
- Environmental audit and emission inventory development for Mobil Oil's 22-MM barrel per year crude oil terminal in Calcasieu Parish, Louisiana.
- Environmental regulatory review, permit application development and agency liaison for a CO_2 removal expansion at Placid Oil Company's Black Lake Gas Processing Plant.
- Ambient air analysis, emission projection, permit application development and/or compliance evaluation for Mobil Oil Exploration & Producing Southeast, Inc.'s:
    - 125 MMCFPD Golden Meadows Gas processing Facility
    - Cow Island Gas Plant
    - Cameron Gas Plant
    - Modifications to the Cow Island Gas Plant

- Iowa Gas Power Plant
- East Mud Lake Compressor Station
- Lockport Compound Station
- Riverside Purification Station
- Sea Robin Gas Plant Modification
- South Cypress Creek Field
- South Timbalier Gas Plant Modification

- Developed comprehensive ambient air impact analyses of flared and unflared blowout emissions from Mobil Oil Exploration & Producing southeast, Inc. Mobile Bay.
- Ambient air impact analyses, control technology review, expert testimony, testing, evaluation, and agency liaison, for the sour gas processing facilities of Amerada Hess, Mobil, Shell, and Triad Oil and Gas in Central Mississippi.

Louisiana Department of Environmental Quality Contract Experience

- Contract manager for LDEQ Contract No. 5501-02-02. Coordinated with DEQ project personnel, identified professional staff and Quality Assurance to provide Certified Project Designer and contractor selection support for asbestos abatement of the Neale Compressor Station near Merryville, LA.
- Contract manager for LDEQ Contract No. 537067. Coordinated with DEQ project personnel, identified professional and staff personnel, and project deliverable Quality Assurance to meet agency project needs to:
    - Develop cross sections and profiles of three impoundments and depressions and levee cross sections along the treated water discharge line at the Old Inger Site.
    - Provided asbestos inspection and supervisory personnel, a site clearing contractor, onsite training, site characterization, abatement and remediation planning and contract development support as well as cost estimating for the Neale Compressor Station.
    - Determine the waste volume and disposal costs

associated of all wastes in all tanks, drums, UST's, trailer tanks, frac tanks, waste bags, containers, mixing tanks and any visibly contaminated / stained soils that existed from spills associated with tanks and containers at the Major Mud and Chemical Site.

- Determine the arsenic background levels in soil at the Malter International site in Gretna, Louisiana in accordance with the Risk Evaluation / Corrective Action Program (RECAP) of the Louisiana Department of Environmental Quality. Project deliverables were to be a Sampling and Analysis Plan and an Arsenic Background Determination Report.

- Contract manager for DEQ Contract 523177, Engineering Services for Phase I of the Capitol Lakes Remedial Investigation. The project consisted of:
  - Validation of analytical data
  - Engineering oversight of coring operations
  - Preparation of Phase I Capitol Lakes Remedial Investigation Report
- Contract and project manager for DEQ Contract 288009501. Coordinated with DEQ project personnel, identified professional and staff personnel, and project deliverable Quality Assurance to meet agency project needs to:
  - Develop topographic maps of the Kenner Marine & Machine Site
  - Develop a of scope of work documents for Tasks 7,8,9,11,12 and 13 and construction cost estimates for the Phase 2 remediation contract documents for the S&G Drilling Fluids Services Site.
  - Develop a specification and constructed cost estimate for construction of a groundwater recovery and treatment system at the Tiger Heights Site in Prairieville.
  - Develop a scope of services document for DEQ to use to solicit oversight monitoring of the Phase II remediation of the S&G Drilling Fluids Services Site.

- Develop topographic maps and location of site impoundments at the Colfax Lumber and Creosote Site.
- Provide drafting support for the revision of the S&G Site remediation oversight bid document.
- Provide surveying and mapping of the BWS Basile Site.
- Review and evaluate the work plan and the health and safety plan for the remedial investigation at the Capitol Lakes Site.
- Provide engineering oversight, surveying, data validation and report preparation of the Capitol Lakes Remedial Investigation.

- Discipline manager and Quality Assurance officer for DEQ contract 23300-93-21. The project involved the development of a Fiscal and Economic Impact Statement for Administrative Rules relating to the Enhanced Motor Vehicle Inspection / Maintenance Program.

Environmental Site Assessments / Site Investigations

- Principal in Charge of over 1500 environmental site assessments performed by the New Orleans Office in the past twenty years. Projects covered a broad range of properties from undeveloped tracts of land to larger more complex commercial and industrial properties.

Solid and Hazardous Waste

- Principal in charge of projects involving the identification, locating, mapping, chemical characterization and closure design development for over 500 well sites in Louisiana for two major exploration and production companies.
- Project manager on several projects for the American Petroleum Institute and Offshore Operators Committee dealing with the economic, safety and environmental impacts of onshore disposal of water based drilling fluids and cuttings and the impact of proposed NSPS and BAT effluent guidelines
- Technical control of solvent and petroleum area contamination study and correction plan for Citcon refinery in Lake Charles, LA.

- Project manager of conceptual design and feasibility study of large commercial hazardous waste treatment and disposal facilities for Chemical Waste Management in Louisiana, Texas, and Argentina, including storage tanks, drum storage and decanting, solidification, extract recovery, deep well injection, activated sludge, secondary sewage, tertiary treatment systems and incineration.

- Project Manager and Principal-In-Charge for the Louisiana Department of Environmental Quality on numerous environmental consulting assignments including environmental, social economic evaluation of alternative environmental regulations pertaining to enhanced motor vehicle inspections and maintenance and assessment of industrial solid waste generated in Louisiana. Other assignment involved hazardous/solid waste and asbestos engineering design and specification development, site investigation, and risk assessments for numerous sites under a 6 year contract, with special task contracts for the Remediation Services Division.
- Hazardous waste application, closure plans/designs, waste and wastewater characterization studies for CITGO and Cit-Con.
- Developed closure plans, procedures and designs for Chemical Waste Management's proposed storage, land treatment impoundments and incinerators in Texas and Louisiana.
- RCRA Part B permitting for over 15 solid and hazardous waste disposal facilities, including an application for existing and proposed hazardous waste storage facilities at England Air Force Base and proposed facility at Fork Polk, LA for the Army Corps of Engineers, Ft. Worth District.
- Provide technical oversight and was principal in charge of a one-year treatment demonstration (bioremediation) for a refinery hazardous waste land treatment facility. The project included the development of a demonstration plan, conducting the demonstration and preparing the demonstration report. It included extensive evaluation of the effectiveness of treatment, fate and transport mechanisms, vadose zones and groundwater elevations, modeling of the treatment and vadose zone, regulatory criteria and statistical analysis.

- Provided technical oversight of a soil bioremediation project for a Louisiana Port authority. Site soils located adjacent to a waterway were contaminated with petroleum hydrocarbons. The soils were placed in constructed cells on-site and appropriate amendments were added to the soils to maximize the bio-treatment process. The soils were monitored for treatment effectiveness and concentrations of chemical parameters over time.

- Provided technical oversight of a bioremediation project to confirm, evaluate hazards, field inspect, conduct feasibility studies and prepare designs for the clean-up of two crude oil contaminated sites in a wetland area. Project included performing site investigations and feasibility evaluations and preparation of a report on remedial technologies, recommending in-situ bioremediation as the appropriate remediation method. Upon approval, construction specifications were prepared and proper permit applications were submitted, necessary equipment was deployed to the sites, applications of microorganisms and nutrients were performed, soil and water samples were collected, laboratory analysis of soil and water samples were performed, laboratory results were evaluated, and a close-out documentation for the two sites were prepared. The close-out documentation was submitted in time to meet the compliance order deadline and return the affected area to its original state.

- Technical oversight for refinery wastewater segregation and impoundment evaluations (2 separate projects and refinery clients) in order to maintain a non-RCRA status. Included detailed review of primary sludge, TC and benzene NESHAPs as applied to the refinery wastewater streams, impoundments, process and tankage facilities, loading facilities, etc. Regulatory strategy analysis and feasibility was provided. A team of process, civil and environmental personnel provided in-plant and in-house services including sampling/analysis and design/ reconfiguration of facilities to maintain a regulatory posture that did not trigger RCRA. Input was provided for replacement / re-design and closure of impoundments to meet the definition of "tank" to qualify as wastewater treatment units. Members of the team served as agency

liaison and negotiated with state and EPA personnel.

- Technical Director for the Army Corps of Engineers, Ft. Worth District responsible for the design of a gasoline recovery trench system at Holloman AFB, NM. The system recovered more than 40,000 gallons of gasoline from the groundwater at the Base Service Station.
- Directed the remedial investigation and feasibility evaluations of 15 hazardous waste sites at England Air Force Base in Alexandria, LA. Investigations involved fire training areas, runway runoff areas, landfills, buried drums, fuel storage areas, sewage treatment lagoons, pipeline leaks, and under ground storage facilities.
- Technical oversight for the remedial investigation feasibility evaluations of 18 hazardous waste sites at Cannon Air Force Base in New Mexico. Investigations involved herbicide / pesticide rinse areas, landfills, fire training area, jet engine test pads, buried drums, sewage treatment lagoons, drying beds, under ground storage tanks, and free product recovery.
- Technical review of geotechnical and groundwater monitoring programs for 10 hazardous waste management facilities.

Water and Wastewater

- Evaluations of effluent permit limitation and wastewater management and systems and the design of treatment modifications for Entergy's Michoud, and Market Street Stations.
- Wastewater drainage and environmental assessment for 200,000 barrel per day fuel oil refinery. Effluent treatment system design development consisting of oil water separation, equalization, dissolved air flotation, complete mixed activated sludge, aerobic sludge digestion, effluent polishing, and post aeration.
- Established protocol and directed pilot testing of aerobic biological treatment system for effluent treatment upgrading of a yeast production facility. Developed conceptual design and overview of detail design of conversion of a fixed media biological treatment system to complete mixed activated sludge. Established aeration equipment certification protocol and performed oxygen

transfer performance testing.

- For Marathon's Garyville refinery conversion to motor fuel production developed effluent characterizations, performed effluent guideline evaluations and regulatory compliance determinations, conducted performance evaluation of existing wastewater treatment system, and identified design modifications necessary to meet new permit requirements. Effluent treatment unit operations addressed were API oil / water separation, flocculation, air flotation, and complete mixed activated sludge.
- For Witco's Taft Facility directed the evaluation of the permit and treatment requirements to retire an in ground waste water pretreatment to a deep well injection system and the developed the conceptual design for an above ground equalization, sedimentation and polishing system.
- Directed the development of waste water characterizations, effluent and water quality limitations for the permitting of a 16,000 metric tons per day urea production facility.
- Water discharge evaluation and permit application for Shell Oil Company's Stingray Gas Plant.
- Wastewater characterization and effluent treatment system evaluation of refinery facultative treatment ponds. Developed design modifications for the conversion of existing facilities to aerated biological treatment and secondary settling to meet increased treatment demands due to refiner expansion.
- Wastewater management evaluations, effluent characterizations, fundamentally different factor regulatory appeal development, and environmental impact assessments of the phosphate fertilizer industry in Louisiana.
- Conducted pilot tests, performed bench scale chemical coagulant and flocculent evaluations, developed process design concepts, developed performance specifications, performed bid evaluations, and participated in the start up of effluent treatment facilities for a silica pigments manufacturing, packaging and shipping facility. Unit operations included sand, multimedia, diatomaceous earth, and upflow filtration, polyelectrolyte flocculation, and gravity sedimentation.

- Regulatory evaluation, spill planning and management and air and water permitting assistance for an underground natural gas storage and transfer station for Bridgeline Gas Co.
- Water discharge evaluation and permit application for Shell Oil Company's Stingray Gas Plant.
- Wastewater drainage and environmental assessment for Atlas Processing Company.

AREAS OF EXPERTISE

- Site Assessments – Phase I and II
- Solid and Hazardous Waste – Characterization and Remediation
- Site Closures – Clean and In-Place
- Risk Assessments
- Feasibility Studies

EDUCATION

B.S. Civil Engineering, Tulane University, 1986

M.S., Civil Engineering, University of New Orleans, 1998

TRAINING

OSHA 29 CFR 1910.120 40-hour training

8-hour OSHA Annual Refresher, 2005

PROFESSIONAL HISTORY

Walk Haydel/Dames & Moore/URS Corporation 1987 – present

PROFESSIONAL REGISTRATIONS

Registered Professional Environmental Engineer, Louisiana, 1995

REPRESENTATIVE EXPERIENCE

Ms. Fortier has fifteen (15) years of environmental consulting experience. As a civil engineer, by degree, she has been able to use her engineering knowledge for environmental applications such as cap and leachate collection design.

Her experience also includes performance of both baseline risk assessments and assessments of remedial options. She is knowledgeable of both local (LDEQ) and EPA regulations regarding acceptable risk.

Environmental Site Assessments / Site Investigations

- Conducted numerous Phase I and Phase II investigations on apartment complexes, office buildings, undeveloped land, dry cleaners, etc. for banks, lawyers, insurance companies and private individuals.
- Prepared numerous environmental assessments for commercial real estate, including property containing underground storage tanks throughout Louisiana.
- Prepared baseline risk assessments (EPA protocol) for four Air Force bases under Remedial Investigation: Cannon, Bergstrom, Holloman and England. Sites included fire training areas, POL areas, landfills and USTs. Risk assessments followed EPA protocol for human health and environmental evaluations. Assessments included computer-aided modeling (vadose and saturated zones) to predict the transport of contamination and determine possible exposure point concentrations. Computer program was also used in computation of risk values. This expedited the risk evaluation process as well as enabled rapid sensitivity analyses.

Solid and Hazardous Waste

- Assisted in drafting of CITGO Hazardous Waste RCRA Part II application. Primary participation was in closure design of impoundments.
- Assisted in drafting of solid waste permit applications, review of tank assessments, secondary containment systems, SPCC plans and reclassification of facilities.
- Prepared design package for in-place closure of hazardous waste impoundment. Design package included cap design, surface and subsurface drainage design and

associated specifications for solidification/stabilization.

- Prepared numerous sampling and analysis plans and remediation reports based upon knowledge of Louisiana's Risk Evaluation/Corrective Action Plan.
- Developed Corrective Action Plan for gasoline service station. Plan included establishment of soil venting remediation in conjunction with groundwater remediation. Participated in pilot testing of soil venting and preparation of construction specifications for full-scale soil venting remediation.
- Developed feasibility study for closure of large hazardous waste impoundment in Louisiana. Study included in-situ and ex-situ options, the possible use of corrective action management units, and associated costs for each.
- Prepared Feasibility Study for five sites containing fuel contamination - two sites at Holloman AFB, N.M., one at England AFB, LA and two at Bergstrom AFB, Texas. Sites included POL areas, UST's, landfills and contained soil and groundwater contamination.
- Assisted in preparation of preliminary design of solid and hazardous waste disposal facilities for industrial settlement in Malaysia. Design included landfills, recycling and composting facilities.
- Supervised sampling and prepared various closure reports for hazardous waste impoundments, pits and equipment. Closures included clean closures and in-place closures using solidification/stabilization. Recent closure reports have incorporated risk-based clean-up levels.
- Technical consultation experience in solid and hazardous waste issues. Extensive experience in preparing quality assurance and sampling analysis plans and in risk based analysis.
- Prepared Environmental Compliance Audit of New Orleans Lakefront Airport. Audit included site inspection and interviews with over 20 airport tenants.
- Conducted noise analysis for proposed east-west thoroughfare in Jefferson Parish, Louisiana. Analysis included field sampling and computer aided noise projections.
- Prepared RFI Work Plan for major refinery in Louisiana.

Work Plan incorporated over 50 Solid Waste Management Units.

- Participated in investigation of former landfill under litigation. Field work included soil, air, surface water and sediment sampling. Remedial investigation report included baseline risk assessment.
- Lead Field Engineer for 3-phased remedial investigation of former manufactured gas plant containing coal tar contamination and PCBs. Soil, groundwater, sediment and surface water were evaluated. A rigorous site history search was performed to aid in the preliminary determination of the location of contamination.
- Prepared Remedial Investigation reports for numerous sites at three Air Force Bases - Bergstrom, Holloman and England. Assessments of the individual sites included identification of constituent concentrations in soil, groundwater and surface water; vertical and horizontal extent of contamination and characterization of geologic and hydrologic properties.
- Prepared Work plan for POL area at Bergstrom AFB. Work plan consisted of Phase III sampling and investigations.
- Participated in bioremediation pilot study of petroleum contaminated soil.
- Prepared Remedial Action Plan for fire training area at Bergstrom AFB, TX.
- Develop Quality Control Sampling Plans for remedial investigation of hazardous waste sites.
- Developed detailed construction cost estimate for removal of 5 USTS at Holloman AFB, NM.
- Prepared hazardous inventory form in compliance with Louisiana's "Community Right to Know".
- Co-author of a water based drilling fluids and cuttings disposal study update in response to EPA's proposed ruling of zero discharge.

Air Emissions Compliance and Permitting

- Prepared air emissions study for RCRA Part B Permit application for an open burning/open detonation Army ammunition plant.

AREAS OF EXPERTISE

- Permitting
- Audits
- Compliance Management
- Env. Data Systems

EDUCATION

Louisiana State University: B.S. (Env. Management Systems), 1996

TRAINING

Air and Waste Management Assoc. (fundamental of New Source Review), 2000

Environmental Protection Agency: (EPCRA Reporting), 1997

PROFESSIONAL HISTORY

URS/New Orleans, 2000 to Present

Lockheed Martin Space Systems, Env. Management Eng., 1996-2000

REPRESENTATIVE EXPERIENCE

- Mr. Stack has 10 years of experience in environmental compliance. As Compliance Engineer for a large aerospace manufacturing facility for 4 years, Mr. Stack has dealt with all aspects of Environmental Compliance. Experience includes, air quality permitting, negotiation of permit terms, RMP, support of facilities design, compliance strategy development, design and implementation of electronic data management systems, NPDES Permitting, site NPDES compliance assurance work, regulatory reporting, release calculations. In the last 4 years, while working with URS, Mr. Stack's work experience includes preparation of. Risk Management Plans for SOCMI facilities, Title V permits for, Shipyards, Paint Manufacturers, Aerospace Industries, SOCMI facilities and Steel Mini Mills, electronic compliance assurance management systems, Environmental Auditing NPDES Permits, Spill Prevention and Countermeasure Plans and FRPs.
- Preparations of Title V permit applications for Paint Manufacturers, SOCMI facilities, Shipyards, Aerospace Industries and Steel Mini Mills.
- Design of compliance assurance tracking system Chemical Manufacturing Production Units, Shipyards, and Aerospace Industries.
- SPCC and FRP spill prevention and response plans for SOCMI and transportation equipment manufacturing facilities.
- Compliance audits for Shipyard, Aerospace, Refinery, Coffee Roasting Facilities, Hazardous Waste Incinerators, Coating Manufacturing Facilities.
- Design, development and administration of electronic management database (MS Access) to develop LPDES report (DMR) tracking, Title V permit applications, compliance management data depository, emission calculations, and regulatory report generation.
- Env. Support for all operations at aerospace manufacturing and shipyard facilities including surface coating operations, metal cleaning operations, welding operations, composite lay-up and curing operations and facilities operations such as steam generation units.

AREAS OF EXPERTISE

Air Permitting

Water/Wastewater Engineering

Solid/Hazardous Waste

Erosion and Flood Control

Wetland Permitting

EDUCATION

Louisiana State University: B.S. (Biological Engineering), 2001

PROFESSIONAL HISTORY

URS/New Orleans, Environmental Engineer, 2001 to Date

Engineer In Training 2000

AFFILIATIONS

Air and Waste Management Association (AWMA)

REPRESENTATIVE EXPERIENCE

Mr. Doepp has five (5) years experience as an Environmental Engineer including:

Water/Wastewater Engineering

- Project engineer for the NASA-Stennis Space Center (NASA-SSC) wastewater collection and treatment study. Gave detailed evaluation of existing and future wastewater collection and treatment methods at the facility. Recommended a zero discharge alternative for future treatment of wastewater that would accompany population growth at the facility. Corresponded with MDEQ regarding zero discharge applicability. Reported results to both NASA-SSC and the Army Corps of Engineers.
- Gathered sampled outfall lab results and calculated maximum and average parameter concentrations and max and average flow for the LPDES Permit Application for Folgers facility. Organized all data and calculations into the application forms and coordinated the submittal of the LPDES Permit Application.
- Project engineer for the DOW LPDES Permit Application. Participated in the dry weather and stormwater sampling collected for analysis. Organized the results and information into the LPDES Permit Application.
- Project engineer for the three (3) Bollinger shipyard LPDES Permit Applications. Collected DMRs, lab results, and on-site data and organized the information into the LPDES Permit Application.
- Project team member for the LPDES Permit Application for the Chalmette Refinery. Gathered results and calculated the pollutant concentrations and flows necessary for the forms in the LPDES Application.
- Project team member for the Amerchol LPDES Permit Application. Reviewed DMRs and lab results from the facility. Calculated the pollutant concentrations and flows necessary for the forms in the LPDES Application.
- Prepared a state required Disinfection Byproduct Monitoring Plan for a county in Alabama.

Wetland Permitting

- Chevron-Texaco Coastal Use Permit for Chevron Pipeline Company Main Pass 69 Terminal Lease.
- Groundwater Cerification for New Storage and Metering Area on behalf of Marathon Oil Company.

Erosion/Flood Control

- Project team member to protect Louisiana coastal regions by designing systems to prevent erosion.
- Engineer in training for designing and building a modified hydromulcher to replant marsh grass.
- Project coordinator for the collection and allocation of funds from the Department of Natural Resources and the USDA for wetland restoration and flood control.
- Engineer in training for assembling, programming and maintaining equipment for environmental automated systems.
- Designed and built a pumping system to maintain the water table for large plots of land.

Air Quality

- Minor Source Application for Marathon Ashland Pipeline (Manta Ray/Nautilus Garden City Station) St. Mary Parish, LA.
- Pearl Crossing LNG Terminal LLC: Minor Source Air Permit Application for the proposed Johnson's Bayou Metering and Regulating Station in Calcasieu Parish.
- Title V and State Permitting for Bollinger Shipyards, Inc. Yards aided in air permitting include: Lockport, Gretna, Gulf Repair, Larose, Houston, Quick Repair, Algiers, and Calcasieu facilities.
- TEDI and EIS submittals for Eight (8) Bollinger Shipyards including: Lockport, Gretna, Gulf Repair, Larose, Calcasieu, Marine Fabricators, Morgan City, and Amelia Yards.
- TRI applicability determinations and submittals for

Twelve (12) Bollinger Facilities including: Lockport, Larose, Gretna, Gulf Repair, Houston, Texas City, Quick Repair, Algiers, Calcasieu, Marine Fabricators, Morgan City, and Amelia Yards.

- Prepared State Permit Application with air dispersion modeling for Southwest Shipyards in Houston, Texas.
- Project engineer for the DOW Union Carbide Corporation-Taft Plant Title V/PSD Application for the Olefins Units.
- Project engineer for the Sid Richardson Carbon Company Title V Application.

Solid/Hazardous Waste

- Prepared Post Closure permit application for a Union Carbide landfill.
- Project engineer for solid waste permit renewal form Amerchol.

Emergency Response and Preparedness

- Participated in the U.S. Army Corps of Engineers Blue Roof Program to prevent further water damage to houses post Hurricanes Katrina and Rita.
- Worked with FEMA shortly after Hurricanes Katrina and Rita on the High Water Mark Study to gather storm surge and riverine flooding data.
- Contracted by FEMA as part of the hazard mitigation technical assistance program (HMTAP). Worked as an intermediary between the state and FEMA to expedite the review and approval of hazard mitigation plans for 77 jurisdictions in Louisiana.

Surveys

- Participated in a fish survey for Boise Cascade paper company to determine the effects of their wastewater outfall. Fish species were collected and documented.
- Project engineer for a Phase 1 surveys for timber companies. The land was surveyed for possible hazardous waste sites and any other pollutants.