EXHIBIT "1"

# PROFESSIONAL RÉSUMÉ WADE M. WHEATLEY, P.E.

#### FIELDS OF SPECIALIZATION

- Industrial and Hazardous Waste
- Municipal Solid Waste
- Low-Level Radioactive Waste
- Underground Injection
- Alternative Fuels & Conversion
- Recycling
- ♦ Ordnance and Explosive Waste

#### **EDUCATION**

BS in Mechanical Engineering – US Naval Academy, 1985 Explosive Ordnance Disposal School and Advanced coursework Class A MSW Facility Operator License

#### PROFESSIONAL REGISTRATION

Registered Professional Engineer • State of Texas No. 76710

#### PROFESSIONAL EXPERIENCE

Vice President ♦ Cook-Joyce, Inc. ♦ Austin, Texas ♦ 2012 - Present Private Practice ♦ Firm 14196 ♦ Austin, Texas ♦ 2012

Dir. of Facility Operations and Development ♦ Texas Disposal Systems ♦ Austin, Texas ♦ 2005 - 2012

Dir. Waste Permits Division ♦ Texas Commission on Environmental Quality (TCEQ) ♦ Austin, Texas ♦ 1992 – 2005

Manager, Industrial and Hazardous Waste Permits Section ♦ (TCEQ) ♦ Austin, Texas Combustion Team Leader, Industrial and Hazardous Waste Permits Section ♦ (TCEQ) ♦ Austin, Texas RCRA Permit Coordinator, Industrial and Hazardous Waste Permits Section ♦ (TCEQ) ♦ Austin, Texas Captain, Explosive Ordnance Disposal Officer/Engineering Officer ♦ United States Marine Corps♦ Camp Lejeune, NC ♦ 1985 – 1991

## **PROFESSIONAL AFFILIATIONS**

Solid Waste Association of North America- Lone Star Chapter

#### PROFESSIONAL RÉSUMÉ: WADE M. WHEATLEY, P.E.

#### PROJECT EXPERIENCE

#### Private Consulting - February 2012 to Present

- Develop and implement corporate strategies to reconcile business objectives with government and regulatory requirements
- Coordinate and oversee engineering, geology and technical services provided by the company as Vice President of Cook-Joyce, Inc.
- Perform expert witness activities and regulatory negotiation and liaison services for a wide range of clients.

# Texas Disposal Systems Inc., Austin, TX - November 2005 to February 2012 Director of Facility Operations and Development

- Directed and managed projects related to solid waste management and recycling to include permits, registration, notifications and exemptions with authorization in air, water and waste programs
- · Directed and managed alternate fuels programs through all phases of development
- · Directed and managed remediation and compliance for all affiliated companies
- Lead numerous specialized projects, including alternative fuels & conversion technologies, energy & power, recycling, electronic waste, flood plains, low-level radioactive waste, and market analysis

# Texas Commission on Environmental Quality (Formerly Texas Natural Resource Conservation Commission) Austin, TX - May 1992 to October 2005

# **Director, Waste Permits Division**

- Administered programs of the Waste Permits Division, including the oversight of a 115-person staff
- Reviewed and approved all solid waste permits and licenses in Texas
- · Represented the agency at meetings, as well as legislative and administrative hearings
- Evaluated state and federal regulatory developments and proposed legislation
- Managed all aspects of the multi-million dollar division budget

## Manager, Industrial & Hazardous Waste Permits Section

- Managed 42-member supervisory, administrative and technical staff responsible for review of applications and drafting of permits for industrial and hazardous waste management activities in Texas
- Prepared and authorized expenditures for an annual budget of \$2 million

#### Combustion Team Leader, Industrial & Hazardous Waste Permits Section

- · Supervised engineers and chemist responsible for approving hazardous waste combustion units
- Supervised the specialized hazardous waste team

## RCRA Permit Coordinator, Industrial & Hazardous Waste Permits Section

- Provided technical review of RCRA facility permit applications and permits for solid waste management activities requiring a permit
- Conducted RCRA facility assessments, set permit conditions and provided recommendations to the Commission on the issuance of permits

## United States Marine Corps, Camp Lejeune, NC - May 1985 to October 1991 Captain, Explosive Ordnance Disposal Officer/Engineering Officer

- Initiated, coordinated and conducted remediation of ordnance and explosive waste in numerous ordnance and explosive waste-contaminated areas
- Responsible for the design and construction of various vertical and horizontal structures.

# PROFESSIONAL RÉSUMÉ: WADE M. WHEATLEY, P.E.

· Overseas deployment including on-shore and off-shore explosives management

# PROFESSIONAL RÉSUMÉ KEVIN LOUIS LONSETH, P.G.

## FIELDS OF SPECIALIZATION

- Site Investigation and Remediation
  - Phase I Environmental Site Assessments
  - Surface and Subsurface Evaluations
  - Closure Plans
- Landfill/Solid Waste/Wastewater
  - Construction Quality Assurance (CQA) of Municipal and Industrial Waste Landfills
  - Construction Quality Assurance of Wastewater Ponds
- ♦ Field Work
  - Landfill Services Experience
  - Soil and Groundwater Sampling
  - Industrial Waste Sampling
  - Field Mapping and Interpretation
  - Monitor Well Design, Installation, and Development
  - Pump and Aquifer Testing
  - Remedial Construction Oversight
  - Surveying
- Environmental Regulatory Compliance
  - Hazardous Waste Facilities
  - Groundwater Monitoring and Statistical Analysis

## **EDUCATION**

BS in Geology, Engineering Geology Option at Texas A&M University, 1997

# PROFESSIONAL EXPERIENCE

Project Staff IV at Cook-Joyce, Inc., Austin, Texas, 2000 - Present Processing Geophysicist at Western Geophysical, Houston, Texas, 1997 – 2000

#### PROJECT EXPERIENCE

# Waste Control Specialists, Landfill Cell CQA, Andrews County, Texas.

Provided soils, geosynthetics, leak detection system, and leachate collection system CQA for landfill construction at a hazardous waste landfill.

## BFI Sunset Farms Landfill, Landfill Cell CQA, Austin, Texas.

Provided soils, geosynthetics, and leachate collection system CQA for landfill construction of multiple cells at a Type I MSW landfill.

# Precinct 3 -Peñitas Landfill Cell CQA, Hidalgo County, Texas.

Provided CQA for installation of geosynthetic liners in multiple landfill cells.

# Del Monte Wastewater Pond CQA, Crystal City, Texas.

Provided CQA for installation of clay liner.

## PROFESSIONAL RÉSUMÉ RICHARD D. VARNELL, P.G.

#### FIELDS OF SPECIALIZATION

Project Management; Environmental Site Assessments; Environmental Compliance; Site Investigations; Risk Assessments; RCRA Permitting and Compliance; Solid and Hazardous Waste Management; Regulatory Analysis and Compliance Planning; Facility Closure and Property Redevelopment; Site Investigation, Monitoring and Remediation; and Litigation Support.

#### **EDUCATION**

MS in Environmental Sciences ♦ Texas Christian University, Fort Worth, Texas, 1996 BA in Biology, Texas A&M University ♦ College Station, Texas, 1992

#### PROFESSIONAL REGISTRATION

Registered Professional Geologist ♦ State of Texas No. 4992

#### PROFESSIONAL EXPERIENCE

Senior Project Staff ♦ Cook-Joyce, Inc. (CJI) ♦ Austin, Texas ♦ 2004 - Present
President ♦ Beluga Environmental, Ltd. (Beluga) ♦ Fort Worth and Austin, Texas ♦ 2001 - 2004
Project Manager ♦ ARCADIS Geraghty & Miller, Inc. (AG&M) ♦ Austin, Texas ♦ 1997 - 2001
Staff & Project Scientist ♦ Law Engineering, Inc. (LAW) ♦ Dallas, Fort Worth, and Austin, Texas ♦ 1992 - 1997

#### **PROFESSIONAL AFFILIATIONS**

Industry Council on the Environment, Member

## PROJECT EXPERIENCE

Mr. Varnell has approximately 21 years of experience in the environmental consulting field and has served in a variety of technical and managerial roles. Mr. Varnell has worked with industrial and commercial clients in numerous fields including, but not limited to, electric utilities; manufacturing (automotive, aerospace, and electronic); real estate development; municipal and local government; petrochemical production and distribution; and waste treatment and disposal (including municipal, industrial, hazardous, toxic, and low-level radioactive wastes).

At CJI, Mr. Varnell is responsible for managing and implementing projects including Phase I Environmental Site Assessments; soil and groundwater investigation and remediation (including projects conducted in accordance with the Texas Risk Reduction Program - TRRP); regulatory evaluation and interpretation; compliance auditing and planning; RCRA permitting and compliance; and TPDES storm water and industrial wastewater permitting. Mr. Varnell is currently managing or has closed several sites under the TRRP. Aspects of the assessment and/or closure of these sites included the establishment of Municipal Setting Designations (MSDs), Plume Management Zones (PMZs) with a remedial option of Monitored Natural Attenuation (MNA), and in some cases soil and groundwater remediation.

Mr. Varnell has also worked on numerous projects for a hazardous and radioactive waste disposal facility in West Texas. These projects include the management and evaluation of environmental monitoring data and the investigation of two areas (a rail unloading area and a septic drain field) contaminated by hazardous and

## PROFESSIONAL RÉSUMÉ: RICHARD D. VARNELL, P.G.

radioactive wastes under TRRP. These investigations included dose calculations for radionuclides, background determination for metals and radionuclides, and evaluation of soil, subsurface soil, and groundwater chemical, metal, and radionuclide data.

While at Beluga, Mr. Varnell's duties were primarily technical review and project management, but also included fieldwork (boring and monitoring well installation, soil and groundwater sample collection, etc.) when staffing issues arose. Among other work, Beluga performed Phase I Environmental Site Assessments (Phase I ESAs); subsurface investigations and environmental remediation (primarily soil); and prepared Spill Prevention, Control, and Countermeasure (SPCC) and Storm Water Pollution Prevention Plans (SWPPPs). While at Beluga, Mr. Varnell also performed environmental inspections of construction sites on a routine basis. The inspections were stormwater related, but also included general environmental compliance.

During his tenure at AG&M (now ARCADIS), Mr. Varnell's duties were primarily project management, but also included fieldwork (boring and monitoring well installation, sediment, soil, waste, and groundwater sample collection, etc.). Mr. Varnell managed the Phase I ESA program at the office. In addition, Mr. Varnell managed and, in some cases, performed, the investigation and remediation of numerous Voluntary Cleanup Program (VCP) projects, Innocent Owner/Operator Program (IOP) projects, Leaking Petroleum Storage Tank (LPST) projects, spill sites, and sites in the TCEQ's corrective action or enforcement programs. Budget sizes of these projects ranged from \$2,000 to \$1.5 million. Other projects managed included the demolition of a transformer repair/Polychlorinated Biphenyl (PCB) disposal facility; compliance audits for the nation's largest airline; managing the disposal of hazardous waste from a refinery decommissioning; and managing the investigation of several miles of Interstate 35 in New Braunfels, Texas.

At LAW (now Mactec), Mr. Varnell's duties included task and project management. Mr. Varnell performed hundreds of Phase I ESAs at LAW. Extensive fieldwork was performed at dry cleaners, VCP sites, LPST sites, PST sites, air force bases (following Air Force Center for Environmental Excellence [AFCEE] protocols), a tire testing track in Laredo, Texas, and for numerous other "Phase II" projects.

#### Representative projects that Mr. Varnell has worked on include:

Managed the investigation and remediation of a former auto parts manufacturing facility. Soil and groundwater at the facility were contaminated with trichloroethene (TCE). The remediation methodology recommended by CJI and selected by the client has reduced TCE concentrations in groundwater from 850,000 micrograms per liter (ug/L) to non-detect concentrations (< 5 ug/L). Breakdown compounds (dichloroethene isomers and vinyl chloride) have been substantially removed as well. CJI anticipates requesting site closure through the implementation of a plume management zone at the site in the summer of 2013.

Prepared close to 40 SPCC Plans for electric cooperatives and utilities in the State of Texas. These plans were completed for warehouses, storage locations, and substations.

Prepared RCRA permit applications for hazardous waste treatment and storage for a client under regulatory pressure. The applications included a modified Part A Application, a Part B Application, and a Groundwater Compliance Plan under tight timeline and budget considerations. Through the timely submittal of these RCRA documents, the client avoided a regulatory enforcement action.

Obtained NPDES Permits and prepared SWPPPs in 35 jurisdictions for a major airline. In addition, audits of their operations were performed at nine airports in Texas, including Love Field, San Antonio International Airport, and Dallas/Fort Worth International Airport.

Performed a Phase I ESA at Bandera Electric Cooperative's (Bandera) main facility. Based on the Phase I ESA, exploratory sampling was performed. Mr. Varnell delineated the impacts discovered during the

## PROFESSIONAL RÉSUMÉ: RICHARD D. VARNELL, P.G.

exploratory sampling, provided Bandera with a remediation plan, and assisted with the disposal of hazardous waste.

Managed the investigation, remediation (in some cases), risk assessment (in some cases), and closure of four VCP and two IOP sites. Several more sites have been partially managed. One of these properties was a seven-acre former transformer repair facility. The project included permit acquisition and plan preparation; asbestos abatement; the demolition of the repair facility; the remediation and disposal of class 2, class 1, and hazardous wastes and debris; preparation of the Response Action Completion Report; and closure of the site.

Managed a highway expansion project performed for the Texas Department of Transportation (TxDOT) on an 8-mile segment of Interstate 35 in New Braunfels, Texas. The objectives of the project were to identify potentially contaminated sites where utility or road construction was planned, and, through interviews, research, and soil/groundwater sampling, determine if impacts were present. One hundred and four (104) potentially contaminated sites were identified during a Phase I environmental site assessment of the study area. Soil and groundwater were subsequently sampled at 17 of these facilities. The soil and groundwater investigation required Traffic Control Plans and careful coordination with utility locating companies. The results of the subsurface assessment allowed TxDOT to prepare appropriate methods to manage soil and groundwater, make special design modifications to avoid impacted areas, implement stormwater pollution prevention measures, prepare contractors excavating/dewatering impacted areas for potential health and safety concerns, and determine ultimate soil disposal and/or reuse options. Due to this innovative investigation, the project was completed for approximately \$130,000, less than half of the approved budget of \$289,000.

Removed a leaking underground storage tank, remediated impacted soils, performed a risk assessment to eliminate groundwater impacts as an impediment to closure, and obtained closure for a site in Bushland, Texas. At the conclusion of the project, a reimbursement application was submitted to the TNRCC. The TNRCC subsequently reimbursed the expenses incurred by Mr. Varnell's client (with the exception of the standard deductible).

Profiled and disposed of hundreds of tons of hazardous sludges, solids, and debris generated during the partial decommissioning of a refinery in West Texas. Several thousand gallons of hazardous liquids were generated as well. Mr. Varnell handled the initial and annual waste reporting, plan preparation, waste profiling, and waste disposal for this project.

Performed stormwater inspections at multiple residential developments during the initial development phase and during subsequent residential home construction. These inspections were performed for developers and residential homebuilders.

#### **Publications:**

Varnell, Richard. "Ground Water Flow Model for the Optimization of the Ground Water Supply System, City of White Settlement, Texas." Summer 1996.

# PROFESSIONAL RÉSUMÉ KATHY L. McGEE, P.E.

#### **FIELDS OF SPECIALIZATION**

Project Management; Hazardous Waste Management Facility Design and Permitting; Regulatory Evaluations and Compliance Support; Environmental Monitoring Program Development; Site Investigation and Remediation; Regulatory Negotiations/Liaison; Waste Characterization; Closure and Post-Closure Plan Preparation; Environmental Data Review/Evaluation; Water Quality Permitting; Radioactive Waste Licensing Support; Closure Monitoring and Certification

#### **EDUCATION**

BS in Chemical Engineering • The University of Texas at Austin, 1976

#### PROFESSIONAL REGISTRATION

Registered Professional Engineer • State of Texas No. 57783

#### PROFESSIONAL EXPERIENCE

President ♦ Cook-Joyce, Inc. ♦ Austin, Texas ♦ 2013 - Present

Vice President ♦ Cook-Joyce, Inc. ♦ Austin, Texas ♦ 1990 – 2013

Associate ♦ Cook-Joyce, Inc. ♦ Austin, Texas ♦ 1983-1990

Waste Management Engineering Staff ♦ Espey, Huston & Associates, Inc. ♦ Austin, Texas ♦ 1980 - 1983

Engineering Assistant ♦ Texas Department of Water Resources (TDWR) ♦ Austin, Texas ♦ 1979 - 1980

## PROFESSIONAL AFFILIATIONS

Omega Chi Epsilon, Engineering Honor Society American Institute of Chemical Engineers Air and Waste Management Association

#### PROJECT EXPERIENCE

Ms. McGee has over 30 years of experience in the environmental field. She has managed, provided senior oversight for, or worked on numerous projects in each of the following areas: design and permitting of waste management facilities; investigation and remediation of properties containing waste management units and/or impacted environmental media; characterization of wastes and impacted media; closure of industrial solid waste and hazardous waste units; monitoring of waste management facilities; and interpretation of environmental regulations. In addition, Ms. McGee's experience includes projects involving preparation of permit applications to authorize discharges of wastewater and stormwater; Phase I and Phase II Environmental Site Assessments; Spill Prevention, Control and Countermeasure (SPCC) plans; storm water

# PROFESSIONAL RÉSUMÉ: KATHY L. McGEE, P.E.

pollution prevention plans (SWPPPs); Edwards Aquifer Protection Plans, and air quality permit applications. Many of the projects involving wastes and/or contaminated media have been complex, multi-faceted projects spanning many years.

At CJI, Ms. McGee provides technical and regulatory oversight and guidance on all types of projects involving industrial hazardous and non-hazardous waste, as well as radioactive wastes and materials. Ms. McGee has extensive experience in permitting hazardous waste storage, processing, and disposal facilities under the RCRA regulations as adopted by the Texas Commission on Environmental Quality (TCEQ), having participated in or directed the preparation of at least a 60 applications, with approximately half of these applications requiring significant TCEQ technical review. She has also been responsible or provided oversight for multiple site investigation and remediation projects under the RCRA regulations, the current Texas Risk Reduction Program (TRRP) regulations in Chapter 350 of Title 30 of the Texas Administrative Code (TAC), and the prior Risk Reduction Rules in Subchapter S of 30 TAC Chapter 335.

Ms. McGee has been responsible for the collection and evaluation of environmental data at all types of waste management facilities over her entire professional career, ranging from development of routine monitoring programs for groundwater and other environmental media to RCRA Facility Investigations and Corrective Measures Studies to site investigation and remediation projects under TRRP. She has conducted numerous evaluations of environmental monitoring data at a wide variety of industrial, commercial and municipal sites, including evaluations requiring application of statistical tests and qualitative evaluations based on professional judgment.

Through her permitting and regulatory compliance experience, Ms. McGee has developed a thorough knowledge and understanding of local, State, and federal regulations and waste management operations. She has first-hand knowledge and in-depth understanding of the RCRA regulations, having reviewed numerous proposed and adopted rulemakings for this program since its inception in 1980. She specializes in conducting regulatory evaluations and interpretations and in regulatory liaison and negotiations, with a record of achieving environmental goals in a realistic and practical manner. Ms. McGee has also provided expert testimony in evidentiary hearings for industrial wastewater discharge permits and hazardous waste management facility permits, and in litigation involving the disposal of industrial waste.

With Espey, Huston & Associates, Inc., Ms. McGee was responsible for the evaluation and design of all types of industrial and hazardous waste management facilities, including landfills, land treatment facilities, and storage and processing facilities, and was responsible for preparing applications for various types of permits for these facilities, including hazardous waste permit applications from the inception of the RCRA permitting program. She also participated in and directed a variety of investigations into the environmental impacts of existing and proposed facilities, such as surface and groundwater quality assessments and waste sampling and chemical characterizations, and developed reclamation plans for improperly-operated or uncontrolled waste disposal sites.

At the TDWR, Ms. McGee was initially employed in the Industrial Wastewater Unit of the Permits Division. In this capacity, she was responsible for the review of applications for State and federal (NPDES) permits for the discharge of industrial wastewater, determination of applicable discharge limitations and other permit conditions and requirements, and preparation of both the State and NPDES permits. Ms. McGee then worked in the Industrial Compliance Unit of the Enforcement and Field Operations Division of the TDWR. There she was responsible for evaluating industrial solid waste sites and wastewater treatment facilities to determine causes of noncompliance with permits held by the entity, the Rules of the TDWR, and/or State statutes; preparing reports outlining the problems, their causes, and appropriate corrective measures; and coordinating enforcement activities with the legal staff.

# PROFESSIONAL RÉSUMÉ: KATHY L. McGEE, P.E.

## Representative engineering assignments which Ms. McGee has worked on or directed include:

Provided senior oversight for the preparation of a TCEQ wastewater permit application for disposal via evaporation of wastewater and storm water generated at a proposed (now operating) low-level radioactive waste (LLRW) storage and disposal facility in Andrews County, Texas.

Provided senior oversight for the preparation of a RCRA permit application for a hazardous waste surface impoundment to authorize disposal via evaporation of wastewater generated by a proposed (now operating) LLRW treatment, storage and disposal facility in Andrews County, Texas.

Prepared a RCRA permit application for a proposed (now operating) mixed waste (mixed LLRW and hazardous waste) disposal facility in Andrews, Texas, including the waste analysis plan, engineering reports, and closure and post-closure plans

Provided senior oversight for the preparation of a TCEQ wastewater permit application for major amendment of a permit for wastewater and storm water discharges from a byproduct (type of radioactive waste) disposal facility in Andrews County, Texas. This permit amendment application included the preparation of work plans to evaluate aluminum in discharges.

Prepared, managed or provided senior oversight for Part A and Part B RCRA permit applications for numerous hazardous waste storage, treatment and/or disposal facilities in Texas. Prepared engineering designs, specifications, and reports, facility management plans, and closure and post-closure care plans. Also prepared compliance plan applications for many of these facilities to establish corrective action programs for known groundwater impacts.

Provided senior guidance for a project involving technical review of documents, produced by others, related to investigation and closure of a former automotive battery recycling facility in Frisco, Texas

Conducted engineering assessments of leachate collection systems at a commercial hazardous waste landfill facility in Port Arthur, Texas.

Provided senior oversight for preparation of SPCC plans at semiconductor manufacturing and oil and gas production facilities.

Prepared license applications for radioactive materials storage, processing, and disposal facilities.

Provided senior oversight for development of environmental monitoring programs at facilities that manage radioactive materials and wastes.

Provided senior oversight for preparation of a Phase I and Phase II Environmental Site Assessment to identify and confirm recognized environmental conditions at a plastics injection molding and tooling facility in San Marcos.

Directed and/or provided senior oversight for TRRP investigation of two areas (a rail unloading area and a septic drain field) contaminated by hazardous and radioactive waste, including background determinations for metals and radionuclides and evaluation of soil, subsurface soil, and groundwater chemical, metal, and radionuclide data

Provided senior oversight for the investigation and *in-situ* remediation of a former auto parts manufacturing facility at which soil and groundwater were contaminated with trichloroethene.

# PROFESSIONAL RÉSUMÉ: KATHY L. McGEE, P.E.

Provided senior regulatory and technical oversight for VCP projects related to the assessment and closure of City of Frisco-owned property located near and downstream of a former automotive battery recycling facility in Frisco, Texas.

Directed and/or provided senior oversight for investigation, remediation, and regulatory closure of 8 illegal dumping sites that were associated with the construction of the Alamodome facility on a former iron foundry site in San Antonio, Texas.

Assessment of compliance status and capabilities of waste management procedures, equipment, and personnel.

Development and implementation of programs to characterize and evaluate potential environmental impacts of former and existing commercial, industrial and waste management operations.

Development, evaluation, and implementation of corrective actions for inadequately-controlled waste management units and areas contaminated by releases of industrial, hazardous, and/or radioactive wastes.

Management of construction activities for new and renovated hazardous waste management units and associated stormwater control structures. Development and implementation of waste characterization studies.

Provision of consulting expert services and expert testimony in adjudicatory permit hearings and lawsuits regarding waste management, water quality and contamination issues.

Evaluation of regulatory requirements pertaining to existing and proposed operating procedures at hazardous waste management facilities.

Negotiation of permit and enforcement directive terms and conditions.

Assessment of groundwater quality and evaluation of regulatory requirements for groundwater monitoring programs at industrial hazardous and non-hazardous waste disposal facilities.

Development of groundwater monitoring programs for hazardous waste disposal facilities.

Preparation of closure and post-closure plans for industrial hazardous and non-hazardous waste storage, processing, and disposal facilities.

Monitoring, documentation, and certification of closure of industrial hazardous and non-hazardous waste management units.

#### FIELDS OF SPECIALIZATION

Multi-Disciplinary Project Management; Complex Site Characterization; RCRA, ISW, MSW and Radioactive Waste Facility Permitting and Licensing; Waste Facility Operations and Compliance; Waste Management Process Design; and Landfill, Process and Storage Facilities Construction Oversight and QA/QC, Construction Certification, and Startup Testing

#### **EDUCATION**

MS in Environmental Health Engineering - The University of Texas at Austin, 1978 BS in Chemical Engineering - The University of Texas at Austin, 1970

#### PROFESSIONAL REGISTRATION

Registered Professional Engineer - State of Texas No. 42203

#### PROFESSIONAL EXPERIENCE

President Emeritus, Cook-Joyce, Inc. Austin, Texas March, 2013 - Present

President, Cook-Joyce, Inc. Austin, Texas 1983 - March, 2013

Manager of Waste Management Group, Espey, Huston & Associates, Inc. ♦ Austin, Texas □ 1980 - 1983

Staff Engineer/Chief-Enforcement Support Group ♦ Texas Water Quality Board/Texas Department of Water Resources ♦ Austin, Texas ♦ 1974 - 1980

Graduate Research Fellowship • University of Texas-Department of Environmental Health

Engineering ♦ Austin, Texas ♦ 1972 - 1974

Chemical Process Engineer ♦ Gulf Oil Corporation Refinery ♦ Port Arthur, Texas ♦1971 - 1972

#### PROFESSIONAL AFFILIATIONS

American Institute of Chemical Engineers Air and Waste Management Association

#### PROJECT EXPERIENCE

Mr. Cook serves as Director of Technical Services for the company. In this capacity, he has responsibility for the engineering, geology and technical services provided by the company. In addition, he performs expert witness activities and regulatory negotiation and liaison services for a wide range of clients. At CJI, Mr. Cook has worked on numerous commercial and non-commercial hazardous and radioactive waste management facility permits and MSW permits for

clients. He has performed and managed the process design for several large commercial hazardous and radioactive waste management facilities and for several industrial and non-hazardous waste management facilities. In addition, Mr. Cook has acted in the capacity of certifying engineer for construction of commercial hazardous waste management facilities, byproduct disposal facilities and low-level radioactive waste storage, treatment and disposal facilities, overseeing and providing on-site review of the engineering, procurement and construction activities. Further, Mr. Cook has provided regulatory liaison and compliance monitoring services for several clients for commercial and non-commercial RCRA facilities.

With Espey, Huston & Associates, Inc., Mr. Cook was Manager of the Waste Management Engineering Program. In that position, he managed the activities of engineers, geologists, and technicians specializing in solid and hazardous waste management for municipalities; commercial waste management and disposal firms; refining and petrochemical industries; lignite and coal utilities; metal products industries; computer chip industries; and other industries and groups that generated, treated, stored, recycled, or disposed of waste. He also participated in and directed numerous projects involving the design of municipal and industrial hazardous and nonhazardous waste storage, processing, and disposal facilities; investigation of potential waste disposal sites to determine their suitability; and evaluation of existing waste management sites in terms of environmental impacts, regulatory compliance, and remedial actions.

At the TWQB/TDWR, Mr. Cook was involved in the establishment of an enforcement group for the agency. Serving as an Engineer in that group, he was responsible for evaluating industrial and municipal wastewater treatment plants and industrial solid waste sites to determine causes of noncompliance with the respective entities' permits, preparing reports detailing the problems, coordinating enforcement activities with legal staff, preparing and presenting technical presentations at public hearings, and preparing and presenting testimony during court proceedings. Mr. Cook served as Chief of the Enforcement Support Group. He was responsible for coordinating the enforcement activities of the agency, supervising the Enforcement Investigations staff and reviewing the investigation reports and technical recommendations of the staff. During the period with the Agency, Mr. Cook participated on numerous task forces with various other Agency personnel in the development of regulations and strategies. Mr. Cook served on EPA committees with members from other states to review the Draft Resource Conservation and Recovery Act Regulations, advise as to the methodologies that Texas used for industrial and hazardous waste management and recommend methods for implementation of the Federal Regulations.

As a Chemical Process Engineer with Gulf Oil Corporation, Mr. Cook was responsible for maintaining daily surveillance of several refinery process units. The surveillance included gathering operating data and assessing the continuing operational performance of the units. In addition, he worked on special projects to design process upgrades for operating units; design, procure, assemble and test process unit equipment modifications; and design and implement full scale process unit test runs.

# Representative engineering assignments which Mr. Cook has worked on or directed include:

Project Manager for Construction Quality Assurance for the construction of two adjacent low-level

radioactive waste storage and disposal facilities (Compact Waste Disposal Facility and Federal Waste Disposal Facility) at the WCS facility west of Andrews, Texas. The construction QA/QC program was planned and performed in accordance with Nuclear Quality Assurance 1 guidance and protocols. Full-time construction inspection and data collection was provided by a team of as many as 10 on-site engineers, geologists and scientists.

Project Manager for multi-year low-level radioactive waste disposal licensing effort, including directing a team of geologists, hydrogeologists and engineers performing site characterization. Over five hundred piezometers were installed to collect near surface and deeper groundwater levels. Out of the ordinary site characterization tools employed or required included installation an array of heat dissipation sensors installed in borings to measure the matric potential of the native soils with depth and to identify the location of the zone of saturation; three sets of two parallel slant drill holes with 15 feet of separation were installed to over 200 feet of depth, one hole was pressurized and the other was monitored in a effort to identify soil fractures that could be a preferential contaminant pathway; and steel casings were installed to approximately 300 feet and cemented in place to allow periodic geophysical logging to evaluate potentially changing saturation levels in the subsurface.

Project Manager for the design and construction of storage pads to be used for the storage of LSA radioactive waste materials.

Project Principal for preparation of construction plans, construction management and certification of two hazardous waste landfill cells at a hazardous waste landfill in West Texas. The project included closing two of the previously filled landfill cells with a RCRA cap. The project also involved permit modifications with the Texas Commission on Environmental Quality.

Client project director and regulatory liaison for the design of a low level radioactive waste landfill facility, which includes two landfills, one for compact waste and the other for federal facility waste. Coordinated the work of several contractors and consultants and directed the landfill designs.

Project Manager for the design of a byproduct material landfill and preparation of a landfill license application submitted to the Texas Department of State Health Services, for which the regulatory responsibility was later transferred to the Texas Commission on Environmental Quality.

Project Principal for a TSCA reauthorization application for the storage, processing and landfill facilities at a West Texas facility.

Project Principal for a hazardous waste management facility permit renewal application, which included design of landfill enlargement, liner modifications and storage and processing facilities.

Project Principal for design of and permit application for a stand alone landfill expansion for an existing hazardous waste storage, processing and disposal facility located in South Texas.

Project Manager for design and permitting of a hazardous waste treatment unit utilizing mixing in tanks to treat hazardous waste to meet land disposal restrictions.

Project Manager to convert a containment building used to treat hazardous wastes to a unit to allow treatment in tanks to meet land disposal restrictions. Provided designs for the tanks and the

secondary containment and certified the construction of the unit.

Project Manager for a hazardous waste management facility permit renewal application, which included storage and processing facilities and an incinerator. The renewal included a risk assessment in accordance with the EPA/TCEQ Hazardous Waste Combustion Strategy. The permit was exhaustively negotiated with the TCEQ and ultimately issued.

Project Manager for final closure of a pre-RCRA commercial hazardous waste landfill that had last received waste in 1985. Project included construction oversight of installation of leachate collection wells and risers in trenches, installation of an automatic leachate collection system, placement and testing of final cover and cap on the 282 acre landfill and producing a final closure report for the TCEQ. The closure was accepted and the landfill is now in post-closure.

Project Manager for design assistance, permitting, construction oversight, construction certification and testing a wet electrostatic precipitator and larger induced draft fan for a hazardous waste incinerator.

Project Manager for design assistance, equipment procurement, construction management and oversight, equipment testing and construction certification for a mixed waste stabilization building at a hazardous and radioactive waste treatment and storage facility in West Texas.

Project Manager for design assistance and permitting a bulk materials handling building to be used to treat and condition hazardous waste to be fed to a hazardous waste incinerator. The building included two shredders, drum elevators, mixing tanks, conveyors, remotely operated bridge crane clam, remotely operated backhoe arm clam, and a Putzmeister ram feeder to feed shredded hazardous waste through a tube into the rotary kiln. The unit also included a catalytic thermal oxidation unit to control emissions. Also provided construction oversight and certification of construction for the \$20 MM unit.

Project Manager for design, permitting, construction oversight and certification of a 4000 drum hazardous and TSCA waste storage unit located at the incinerator facility.

Project Manager for a RCRA incinerator risk assessment trial burn which formed the basis for performing the risk assessment for renewal permitting of the incinerator. This work included extensive negotiations with the TCEQ regarding how the trial burn would be conducted and what process and analytical data would be collected. The trial burn was also a TSCA trial burn which formed the basis for TSCA reauthorization approval.

Project Manager for a TSCA reauthorization application for a hazardous waste storage, processing and incineration facility.

Project Manager for a permit application for a commercial hazardous waste management facility to be located in Wharton County, Texas to include hydrocarbon recovery, waste stabilization, container storage, tank storage, and salt dome cavern disposal.

Project Principal for investigation and remediation of a property contaminated with petroleum hydrocarbons and other organic contaminants for a property transaction, remediated in accordance with TNRCC Risk Reduction Standards.

Project Principal for the permitting and design assistance of a captive hazardous waste incineration facility for a major semiconductor manufacturer in North Texas.

Project Principal for the permitting and design assistance of a captive hazardous waste incineration facility for a Gulf Coast petrochemical and pharmaceutical manufacturing and production facility.

Project Principal for Texas State Superfund contract work that included the investigation and ongoing maintenance of several sites.

Project Manager for Preliminary Site Characterization Report for CERCLA Superfund site located at a major aluminum refinery and associated bay system located on the Texas Gulf Coast.

Project Manager for a private firm in a litigation activity involving the previous operation of a lead acid battery manufacturing facility and the resultant contamination of the property; evaluated the cost of remediation of the property in preparation for expert witness testimony.

Project Manager for a private firm in a litigation activity that went to a jury trial involving contaminants left at a facility by a previous tenant. Investigated the nature and extent of the contaminants, prepared cost estimates for remediation and disposal in accordance with current waste classification regulations, prepared and received bids for remediation of the facility, both interior and exterior.

Project Principal for an investigation of a property that was contracted for sale for development of a landfill with the subject property having been previously used for treatment and disposal of wastewaters from a lead acid battery manufacturing facility located adjacent to the property.

Project Principal for remedial investigation, feasibility study, and remediation of property that had received lead-contaminated cable fluff, remediated and closed the land disposal activity in accordance with TNRCC Risk Reduction Standards.

Project Principal for initial investigation and cost evaluation for investigation and remediation of lead and other heavy metal-contaminated soils from the construction activity associated with a major sports complex.

Project Principal for waste materials management assistance for Texas State Capitol Restoration Project.

Project Principal for the investigation of a ship refurbishment dry dock facility disposal area that received sandblast grit from the ship refurbishing and painting operations, remediated the landfill area by removal and clean closure of the site in accordance with TNRCC Risk Reduction Standards.

Project Principal for air modeling project for a major commercial hazardous waste landfill and treatment facility.

Project Principal for air modeling and air permitting project for a butadiene/styrene rubber

manufacturing facility.

Project Principal for permitting and air modeling for burning hazardous waste in a cement kiln.

Project Principal for project to prepare a remedial investigation workplan for a cement kiln dust disposal landfill and negotiation of the conditions with the regulatory agencies.

Project Manager for preparation of conceptual and engineering designs for a commercial hazardous waste treatment facility, including receiving, storage, treatment, and stabilization supporting a commercial hazardous waste landfill and transshipment facility.

Project Manager for detailed engineering, construction, and start-up oversight for client for 150-mm BTU/hr commercial hazardous waste incinerator and process facilities. This project included construction oversight and certification activities. Following startup, managed trial burn testing to demonstrate the unit for construction acceptance, managed the initial RCRA and TSCA trial burns and managed several bi-annual test burns for the facility.

Project Manager for preliminary design and permitting (TWC, TACB, and EPA) for the commercial hazardous waste incineration facility.

Project Manager for the design and permitting activities for a 384-acre commercial municipal solid waste baling facility and landfill.

Project Manager for the design of solid waste disposal facilities for a coal-fired power plant and aluminum smelter.

Project Principal for design and permitting activities for a facility to be used for disposal of solids resulting from pretreatment of hazardous waste prior to deep well injection.

## Seminars, Lectures and Presentations:

University of Texas – Have presented hazardous waste seminars for Environmental Health Engineering graduate school seminar classes for several years

University of Texas - Conducted classes for Texas Registered Professional Engineers Examination review class relating to industrial and municipal solid waste management methodologies.

Various Professional Seminars - Made presentations relating to industrial and municipal solid and hazardous waste management techniques and methodologies and incinerator design, operations and testing.

# PROFESSIONAL RÉSUMÉ DON E. BASKIN, P.E.

#### **FIELDS OF SPECIALIZATION**

Air Quality Permitting, Compliance and Reporting; Atmospheric Dispersion Modeling, EPCRA Tier 2 and Toxic Release Inventory Reporting; Industrial Hazardous and Non-Hazardous Waste Management, Characterization and Reporting; Environment, Health and Safety Compliance Program Development; DOT Compliance for Shippers; International Fire / Building Codes; and OSHA 1910 Regulatory Compliance.

#### **EDUCATION**

MS, Environmental Engineering, University of Illinois, 1985 BS, Civil Engineering, Texas A&M University, 1982

#### PROFESSIONAL REGISTRATION

Registered Professional Engineer, State of Texas No. 76322

#### PROFESSIONAL EXPERIENCE

Senior Project Staff, Cook-Joyce, Inc., Austin, Texas, 2008 - Present ESH Operations Manager, SEMATECH/ATDF, Austin, Texas, 2003 – 2008 Environmental Affairs Manager, SEMATECH, Austin, Texas, 1997 - 2003 Senior Project Staff, Cook-Joyce, Inc., Austin, Texas, 1994 - 1997 Environmental Engineer, Koch Refining Co., Corpus Christi, Texas, 1987 – 1993 Associate Environmental Engineer, Marathon Oil Co., Anchorage, Alaska, 1986 – 1987 Associate Environmental Engineer, Marathon Oil Co., Lafayette, Louisiana, 1985 – 1986

#### PROFESSIONAL AFFILIATIONS

Chi Epsilon, Civil Engineering Honor Society

#### PROJECT EXPERIENCE

Mr. Baskin has over 25 years of environmental engineering experience, a majority of which was gained while working in the oil refining and semiconductor industries. Mr. Baskin has also provided environmental services to clients in the following industries: chemical manufacturing, electronics manufacturing and assembly, brick manufacturing; ship sandblasting and painting; aircraft parts painting (spray booth); hazardous waste treatment, storage, and disposal; armored car manufacturing, automobile parts remanufacturing; and minerals mining and processing. His primary areas of expertise are in air quality permitting and compliance, dispersion modeling, industrial hazardous/nonhazardous waste management, and EPCRA reporting.

# PROFESSIONAL RÉSUMÉ: DON E. BASKIN, P.E.

As a member of the Senior Project Staff at CJI, Mr. Baskin prepares Texas Commission on Environmental Quality (TCEQ) New Source Review permit applications and associated air dispersion modeling, Permit by Rule registrations, emissions inventories, Texas Tier 2 (SARA312) reports and Toxic Release Inventory (SARA 313) reports for a variety of clients. Mr. Baskin has also conducted compliance audits with respect to air quality regulations and permits, and RCRA Subpart CC regulations.

While at SEMATECH (and its subsidiary, ATDF), Mr. Baskin was the ESH Operations Manager for the semiconductor R&D facility. In that role, he managed the activities of the ESH Operations staff and occupational nurse, and was responsible for site compliance with environmental, safety and health regulations. The ESH Operations department developed and managed over 40 ESH programs covering worker safety, health and personal protection, hazardous materials management, emergency response, ESH training, and environmental compliance. Mr. Baskin also served as the facility's Environmental Engineer and managed all aspects of environmental compliance.

With Koch Refining Company, Mr. Baskin coordinated air and wastewater permitting and compliance activities for the refinery/petrochemical complex, provided technical assistance to the refinery's wastewater treatment facilities, prepared annual reports pursuant to EPCRA, and assisted with the management and disposal of hazardous and nonhazardous wastes.

At Marathon Oil Company, Mr. Baskin provided environmental support to Marathon's offshore and shore-based oil & gas production facilities in the Gulf of Mexico and Cook Inlet. He also conducted safety inspections of the facilities, established safety programs and policies, and investigated and reported on personnel accidents.

#### Representative project experience:

Prepared New Source Review permit applications and/or Permit by Rule registrations for clients in various industries, including hazardous waste disposal, chemical manufacturing, semiconductor manufacturing, armored car manufacturing / vehicle refinishing, shipbuilding and repair, and minerals mining and processing.

Conducted a compliance audit of a chemical manufacturing facility with respect to TCEQ and EPA air quality regulations and the facility's TCEQ air quality permit.

Performed a Resource Conservation and Recovery Act (RCRA) Subpart CC applicability determination and compliance audit for a semiconductor manufacturing facility, then prepared a written fugitive emission monitoring plan for the facility.

Conducted a compliance audit of a commercial hazardous waste treatment/disposal facility with respect to TCEQ (formerly TNRCC) and EPA air quality regulations, RCRA Subpart CC regulations, and the facility's TNRCC air quality permit.

Prepared Pollution Prevention (P2) Plans for a semiconductor manufacturing facility and a utility trailer manufacturing facility. Continue to assist these and other facilities prepare their annual P2 Progress Report.

Prepared a Spill Prevention, Control and Countermeasures (SPCC) Plan for a semiconductor facility and an oil/gas production facility.

While at SEMATECH, conducted numerous compliance audits of the facility's environmental programs. Developed audit checklists, conducted the audits, identified and completed corrective action items/plans.

# PROFESSIONAL RÉSUMÉ: DON E. BASKIN, P.E.

Coordinated a number of stack testing events for a refinery and semiconductor manufacturing facility.

#### **Publications:**

Co-authored, "Challenges and approaches for introducing TMAI into R&D fab processing," <u>SEMICONDUCTOR FABTECH</u>, 33rd Edition, Q1 2007, pp. 60-62.

Co-authored, "Unified Analysis of Thickening," <u>Journal of Environmental Engineering</u>, ASCE, Vol. 111, Paper 19476, February, 1985, pp. 10-26.