

***COST PROPOSAL
IN-SITU CHEMICAL OXIDATION
ALLIED STAMPING PLANT
SOUTH BEND, IN***

Prepared for:

CITY OF SOUTH BEND

*Redevelopment Commission
c/o Angie Jacob
City of South Bend
227 W. Jefferson, Room 316
South Bend, IN 46601*

Prepared by:

WIGHTMAN PETRIE ENVIRONMENTAL, INC.

713 S. SCOTT STREET
SOUTH BEND, IN 46601

PHONE: (574) 232-4388

FAX: (574) 232-4333

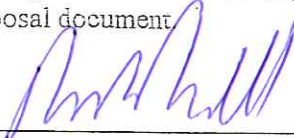
May 20, 2005

PROPOSAL AND AWARD

The undersigned, having become thoroughly familiar with and understanding all of the proposal documents attached hereto, agrees to provide the services as specified herein, for the total fees as stipulated herein.

I hereby state that all of the information I have provided is true, accurate and complete. I hereby state that I have authority to submit this proposal which will become a binding contract if accepted by the City of South Bend. I hereby state that I have not communicated with, nor accepted anything of value from, any official or employee of the City of South Bend that would tend to destroy or hinder free competition.

I hereby state that I have read, understand, and agree to be bound by all of the terms of this proposal document.



Signed: _____
President _____
Title: _____

Don MacDone11

Type or Print Name
May 20, 2005

Date:

Company Name: Wightman Petrie Environmental, Inc.
Address: 713 S. Scott Street, South Bend, IN 46601
Contact Name: Don MacDone11
Contact Phone: 574-232-4388
Office: _____
Cell: 574-276-9815
Pager: _____
Contact E-mail: dmacdone11@wpenvironmental.com

CONTRACTORS BID FOR PUBLIC WORKS

PART I

(To be completed for all bids)
(Please type or print)

Date: May 20, 2005

1. Governmental Unit (Owner): City of South Bend
2. County: St. Joseph
3. Bidder (Firm): Wightman Petrie Environmental, Inc.
Address: 713 S. Scott St.
City/State: South Bend, IN 46601
4. Telephone Number: 574-232-4388
5. Agent of Bidder (if applicable): _____

In accordance with notices given, the undersigned offers to furnish labor and/or material necessary to complete the public works project of In-Situ Chemical Oxidation-Former Allied Stamping Plant (Governmental Unit) in accordance with plans and specifications prepared by City of South Bend Redevelopment Commission and dated 5/23/05 for the sum of Two Hundred Thirty Five Thousand Four Hundred Six & 00/100 \$ 235,406.00

The undersigned further agrees to furnish a bond or certified check with this bid for an amount specified in the letting. If alternative bids apply, the undersigned submits a proposal for each in accordance with the terms. Any addendums attached will be specifically referenced at the applicable page.

If additional units of material included in the contract are needed, the cost of units must be the same as that of the original contract if accepted by the Governmental Unit. If the bid is to be awarded on a unit basis, the quantity of the units shall be shown on a separate attachment.

Contractor and his subcontractors, if any, shall not discriminate against or intimidate any employee, or prospective employee, to be employed in the performance of this contract, with respect to any matter directly or indirectly related to employment because of race, religion, color, sex, national origin or ancestry. Breach of this provision may be regarded as a material breach of the contract.

CERTIFICATION OF USE OF UNITED STATES STEEL PRODUCTS

(If applicable)

I, the undersigned bidder or agent as a contractor on a public works project, understand my statutory obligation to use steel products made in the United States. I.C. 5-16-8-2. I hereby certify that I and all subcontractors employed on this project will use U.S. steel products on this project if awarded. I understand that violations hereunder will result in forfeiture of contractual payments.

Form 104-001 (Revised 10/01)

BID OF

Wightman Petrie Environmental, Inc.

(Contractor)

713 S. Scott Street

(Address)

South Bend, IN 46601

FOR

PUBLIC WORKS PROJECTS

OF

In-Situ Chemical Oxidation -

Former Allied Stamping Plant

Filed _____

Action taken _____

ACCEPTANCE

The above bid is accepted this _____ day of _____, subject to the following conditions: _____

Contracting Authority Members:

PART II

(Complete sections I, II, III, and IV for all state and local public works projects as required by statutes if project is one hundred thousand dollars (\$100,000) or more. (IC 36-1-12-4)

Governmental Unit: City of South Bend

Bidder (Firm): Wightman Petrie Environmental, Inc.

Date: May 20, 2005

These statements to be submitted under oath by each bidder with and as a part of his bid. Each additional page for each section as needed.

SECTION I EXPERIENCE QUESTIONNAIRE

What public works projects has your organization completed for the period of one (1) year prior to the date of the current bid?

Contract Amount	Class of Work	When Completed	Name and Address of Owner
\$195,000	Environmental	2005	City of Elkhart, IN, Redevelopment Mark Brinson

What public works projects are now in process of construction by your organization?

Contract Amount	Class of Work	When to be Completed	Name and Address of Owner
\$100,000	UST	Ongoing	City of South Bend, Board of Public Works Redevelopment, Tonya Zozulya

Have you ever failed to complete any work awarded to you? No If so, where and why?

List references from private firms for which you have performed work.

FM Stone Commercial, Elkhart, IN

Ancon Construction, Goshen, IN

Quality Dining, Inc., Mishawaka, IN

SECTION II PLAN AND EQUIPMENT QUESTIONNAIRE

Explain your plan or layout for performing proposed work. (Examples could include a narrative of when you could begin work, completed the project, number of workers, etc. and any other information which you believe could enable the governmental unit consider your bid.)

Our work plan will adhere to the guideline and requirements of the Hull RWP and the City of South Bend's NRQP documents. Wightman Petrie Environmental can begin work immediately upon award and can complete within the required project timeline.

If you intend to sublet any portion of the work, state the name and address of each subcontractor, equipment to be used by the subcontractor, and whether you expect to require a bond. However, if you are unable currently provide a listing, please understand, a listing must be provided prior to contract approval.

Wightman Petrie Environmental will utilize three subcontractors as follows:

Drilling Services: D & T Drilling

Reagent Application: SeaBreeze Technologies, LLC

Laboratory Analysis: A & L Great Lakes

What equipment do you have available to use for the proposed project? Any equipment to be used by subcontractors may also be required to be listed by the governmental unit.

Equipment will include PID meters, field sampling equipment, drillings, water quality analysis metering equipment, injection equipment, and personal protective clothing.

Have you entered into contracts or received offers for all materials which substantiate the prices used in preparing your proposal? Otherwise, please explain the rationale used which would corroborate the prices listed.

Wightman Petrie Environmental has received cost proposals from our proposed Subcontractors which are the basis of our cost proposal.

SECTION III CONTRACTOR'S FINANCIAL STATEMENT

Attachment of bidder's financial statement is mandatory. Any bid submitted without said financial statement as required by statute shall thereby be rendered invalid. The financial statement provided hereunder to the governing body awarding the contract must be specific enough in detail so that said governing body can make a proper determination of the bidder's capability for completing the project if awarded.

SECTION IV OATH AND AFFIRMATION

I hereby affirm under the penalties of perjury that the facts and information contained in the foregoing bid for the works are true and correct to the best of my knowledge and belief.

Dated at Friday this 20th day of May, 2005

Wightman Petrie Environmental, Inc.
(Name of Organization)
By [Signature]
Don MacDonell, President
(Title of Person Signing)

ACKNOWLEDGEMENT

OF Indiana)
COUNTY OF St. Joseph)

Don MacDonell being duly sworn, deposes and says that he is
President of the above Wightman Petrie Environmental
(Title) (Name of Organization)
and that the answers to the questions in the foregoing questionnaires and all statements therein contained are true and correct.

Subscribed and sworn to before me this 20th day of May, 2005
[Signature]
Notary Public

Commission Expires: 7/8/2011
Place of Residence: St. Joseph

NON - COLLUSION AFFIDAVIT

The undersigned bidder or agent, being duly sworn on oath, says that he has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting nor prevent any person from bidding nor to induce anyone to refrain from bidding, and that this bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

He further says that no person or persons, firms, or corporation has, have or will receive directly or indirectly, rebate, fee, gift, commission or thing of value on account of such sale.

OATH AND AFFIRMATION

I affirm under the penalties of perjury that the foregoing facts and information are true and correct to the best of my knowledge and belief.

Dated at Friday this 20th day of May, 2005

Wightman Petrie Environmental

(Name of Organization)

By

Don MacDonell, President

(Title of Person Signing)

ACKNOWLEDGEMENT

OF Indiana)
) SS:
BY OF St. Joseph)

Don MacDonell

being duly sworn, deposes and says that he is

President

of the above Wightman Petrie Environmental

(Title)

(Name of Organization)

and that the

contents contained in the foregoing bid, certification and affidavit are true and correct.

Subscribed and sworn to before me this 20th day of May, 2005

[Signature]
Notary Public

Commission Expires: 7/8/2011

Residence: St. Joseph

CITY OF SOUTH BEND

CHECKLIST FOR BIDDERS

From time to time the South Bend Board of Public Works finds it necessary to reject a bid because it does not comply with statutory requirements. In preparing your bid, please use the following checklist in order to make sure that your bid is done in the proper manner.

_____ Bid prepared on appropriate State Board of Accounts form provided by the Board of Public Works.

_____ Bid signed by proper party with name either printed or typed underneath signature.

_____ Non-Collusion Affidavit (found on prescribed State Board of Accounts form provided) properly notarized. Please note that proper notarization includes name and county of residence of notary typed beneath notary's signature, date commission expires and notary seal.

_____ Proper bid security included. The Bidder has the option of providing either a Certified Check or Bid Bond in the amount indicated in the "Notice to Bidders".

_____ All required additional information is included with the bid.

_____ Non-Discrimination Commitment form, as provided in bid packet.

_____ Bid forwarded to the Board of Public Works, 1316 County-City Building, with adequate time to enable it to arrive before 9:30 a.m. on the deadline date. All bids received after the legally published deadline date and time will be rejected.

NOTE: Incoming mail does not reach the Board of Public Works until after 9:30 a.m. If you are sending your bid via Federal Express or another overnight source, please confirm that your package will arrive before the bid opening time and date.

NON-DEBARMENT AFFIDAVIT AND NONDISCRIMINATION COMMITMENT
FOR CONTRACTORS


STATE OF INDIANA)
) SS:
St. Joseph COUNTY)

The prospective contractor certifies, by submission of this proposal, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

The undersigned contractor agrees that the following nondiscrimination commitment shall be made a part of any contract which it may henceforth enter into with the City of South Bend, Indiana or any of its agencies, boards or commissions:

Contractor agrees not to discriminate against any employee or applicant for employment in the performance of this contract with privileges of employment, or any matter directly or indirectly related to employment, because of race, religion, color, sex, handicap, national origin or ancestry. Breach of this provision may be regarded as a material breach of the contract.

Wightman Petrie Environmental
Offerer (Contractor)


Signature of Contractor or Agent

Subscribed and sworn to before me this 20th day of May, 2005.

My Commission Expires: 7/8/2011
Notary Public

County of Residence: St. Joseph

1316 COUNTY-CITY BUILDING
227 W. JEFFERSON BOULEVARD
SOUTH BEND, INDIANA 46601-1830



PHONE 574/ 235-9251
FAX 574/ 235-9171
TDD 574/ 235-5567

CITY OF SOUTH BEND STEPHEN J. LUECKE, MAYOR
BOARD OF PUBLIC WORKS

Date: 5/13/05
To: All Contractors/Vendors
From: Angela K. Jacob, Clerk
Subject: Addendum Number: 2
Project Name: In-Situ Chemical Oxidation Former Allied Stamping Plant
Project Number: 105-044

ACKNOWLEDGEMENT OF RECEIPT OF ADDENDUM

Date Received: 5/13/05

This addendum is being forwarded to you for the above referenced project.

Please sign below and acknowledge receipt of this Addendum by faxing this sheet to the Board of Public Works at (574) 235-9171 within 24 hours of receipt. THIS ADDENDUM MAY AFFECT YOUR BID.

Notes:

Company: Wightman Petrie Env
Authorized Signature: M. M. Hull
Date: 5/18/05

ENGINEERING
CARL LITRELL, P.E.
574/ 235-9251
FAX 574/ 235-9171

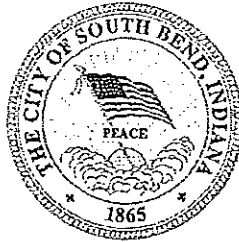
ENVIRONMENTAL SERVICES
JOHN J. DILLON, PH.D.
574/ 277-8515
FAX 574/ 277-8980

CENTRAL SERVICES
MATT CHLEBOWSKI
574/ 235-9316
FAX 574/ 9007

STREETS
SAM HENSLEY
574/ 235-9244
FAX 574/ 235-9272

WATER WORKS
JOHN F. STANCATI
574/ 235-9322
FAX 574/ 235-9728

1316 COUNTY-CITY BUILDING
227 W. JEFFERSON BOULEVARD
SOUTH BEND, INDIANA 46601-1830



PHONE 574/ 235-9251
FAX 574/ 235-9171
TDD 574/ 235-5567

CITY OF SOUTH BEND STEPHEN J. LUECKE, MAYOR
BOARD OF PUBLIC WORKS

Date: 5/6/05
To: All Contractors/Vendors
From: Angela K. Jacob, Clerk
Subject: Addendum Number: 1
Project Name: In-Situ Chemical Oxidation Former Allied
Stamping Plant
Project Number: 105-044

ACKNOWLEDGEMENT OF RECEIPT OF ADDENDUM

Date Received: 5/6/05

This addendum is being forwarded to you for the above referenced project.

Please sign below and acknowledge receipt of this Addendum by faxing this sheet to the Board of Public Works at (574) 235-9171 within 24 hours of receipt. THIS ADDENDUM MAY AFFECT YOUR BID.

Notes:

Company:

Wightman Petric Env

Authorized Signature:

J. Marshall

Date:

5/18/05

ENGINEERING
CARL LITRELL, P.E.
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WIGHTMAN PETRIE ENVIRONMENTAL, INC.

FINANCIAL REPORT

For the Years Ended December 31, 2004 and 2003



McMurray, Marks & Edmunds
certified public accountants

ACCOUNTANT'S COMPILATION REPORT

To the Board of Directors and Stockholders
of Wightman Petrie Environmental, Inc.

We have compiled the accompanying balance sheets of Wightman Petrie Environmental, Inc. (an S corporation) as of December 31, 2004 and 2003 and the related statements of income and retained earnings and cash flows for the years then ended, in accordance with Statements on Standards for Accounting and Review Services issued by the American Institute of Certified Public Accountants.

A compilation is limited to presenting in the form of financial statements information that is the representation of management. We have not audited or reviewed the accompanying financial statements and, accordingly, do not express an opinion or any other form of assurance on them.

As disclosed in Note B to the financial statements, generally accepted accounting principles require that property and equipment be depreciated over their estimated useful lives. The Company has computed depreciation on property and equipment in accordance with the Modified Accelerated Cost Recovery System required for federal income tax purposes, which does not allocate depreciation to expense over the estimated useful lives of the assets. The effects of this departure from generally accepted accounting principles on financial position, results of operations, and cash flows have not been determined.

Management has elected to omit substantially all of the disclosures required by accounting principles generally accepted in the United States of America. If the omitted disclosures were included in the financial statements, they might influence the user's conclusions about the Company's financial position, results of operations, and cash flows. Accordingly, these financial statements are not designed for those who are not informed about such matters.

McMurray, Marks & Edmunds

McMurray, Marks & Edmunds
St. Joseph, Michigan
February 3, 2005

WIGHTMAN PETRIE ENVIRONMENTAL, INC.
BALANCE SHEETS
December 31, 2004 and 2003

ASSETS	<u>2004</u>	<u>2003</u>
CURRENT ASSETS		
Cash	\$ 98,395	\$ 68,415
Accounts receivable	110,439	103,183
Work in process, at cost	9,176	10,866
Employee advances	5,000	400
Note receivable - current	733	-
Total current assets	\$ 223,743	\$ 182,864
PROPERTY AND EQUIPMENT , at cost, less accumulated depreciation of \$153,040 in 2004 and \$151,795 in 2003	263,699	339,204
NOTE RECEIVABLE - NET OF CURRENT PORTION	<u>15,860</u>	<u>-</u>
TOTAL ASSETS	\$ 503,302	\$ 522,068
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts payable	\$ 25,816	\$ 20,750
Payroll taxes withheld and accrued	3,803	9,785
401k payable	951	-
Accrued distribution to stockholders	71,407	79,435
Note payable - current	69,336	21,497
Accrued wages	5,547	12,873
Total current liabilities	\$ 176,860	\$ 144,340
NOTE PAYABLE - NET OF CURRENT PORTION	<u>196,838</u>	<u>239,603</u>
TOTAL LIABILITIES	\$ 373,698	\$ 383,943
STOCKHOLDERS' EQUITY		
Common stock, \$100 par value; authorized 1,000 shares; issued and outstanding 274 and 312 shares in 2004 and 2003, respectively	\$ 27,400	\$ 31,200
Additional paid in capital	7,761	20,784
S Corporation - Accumulated adjustments account	94,443	86,141
Total stockholders' equity	\$ 129,604	\$ 138,125
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	\$ 503,302	\$ 522,068
Book value per share	<u>\$ 473.01</u>	<u>\$ 442.71</u>

See accompanying selected information and accountant's report.

WIGHTMAN PETRIE ENVIRONMENTAL, INC.
 STATEMENTS OF INCOME AND RETAINED EARNINGS
 For the Years Ended December 31, 2004 and 2003

	<u>2004</u>	<u>2003</u>
REVENUES		
Gross billings	\$ 826,550	\$ 614,415
EXPENSES		
Salaries and wages	\$ 271,144	\$ 247,028
Bonuses	41,950	28,300
Payroll taxes	25,823	27,155
Subcontract and lab services	233,080	127,121
Plats, plans and deeds	72	225
Supplies	5,430	12,362
Repairs and maintenance	13,226	11,625
Office supplies and postage	7,734	8,308
Equipment rent	65	5,482
Mileage and travel	17,694	11,965
Utilities and telephone	15,289	16,203
Advertising	5,893	5,445
Insurance	46,653	28,544
Depreciation	26,153	17,321
Seminars and education	6,984	3,863
Pension expense 401(k)	6,660	6,445
Property and miscellaneous taxes	4,768	4,530
Professional fees	13,409	9,468
Dues and subscriptions	589	3,045
Entertainment	2,207	2,805
Contributions	3,445	2,658
Delivery expense	3,939	3,154
Penalties	1,152	671
Licenses and fees	765	1,239
Miscellaneous expense	-	452
Total expenses	<u>\$ 754,124</u>	<u>\$ 585,414</u>
NET INCOME FROM OPERATIONS	<u>\$ 72,426</u>	<u>\$ 29,001</u>
OTHER INCOME (EXPENSE)		
Interest expense	\$ (14,338)	\$ (21,170)
Interest income	610	-
Loss on sale of assets	(9,784)	-
Rental income	5,100	-
Total other income (expense)	<u>\$ (18,412)</u>	<u>\$ (21,170)</u>
NET INCOME	\$ 54,014	\$ 7,831
ACCUMULATED ADJUSTMENTS ACCOUNT, BEGINNING	86,141	115,312
Less: Stockholder distribution	<u>(45,712)</u>	<u>(37,002)</u>
ACCUMULATED ADJUSTMENTS ACCOUNT, ENDING	<u>\$ 94,443</u>	<u>\$ 86,141</u>

See accompanying selected information and accountant's report.

***City of South Bend
In-Situ Oxidation Former Allied Stamping Plant
South Bend, Indiana***

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***Appendix A PROJECT PARTNER
 SEA BREEZE TECHNOLOGIES***

Appendix B PROFESSIONAL STAFF RESUMES



SECTION I
NEED FOR ENVIRONMENTAL
SERVICES

The City of South Bend, Economic Development is requesting environmental engineering services for the Former Allied Stamping Plant Project. As detailed in Hull Associates Remediation Work Plan and the Request for Qualifications and Proposals (City of South Bend) these services will include the following:

Tasks

- 1) Groundwater Monitoring/Reagent Application Well Installation
- 2) Baseline Groundwater Sampling and Analysis
- 3) Bench Scale Testing of Selected Water and Soil Samples
- 4) Pilot Testing/Reagent Application- In-Situ Chemical Oxidation
- 5) Completion Report (Summarizing Results of Task 1-4)
- 6) Health and Safety Plan
- 7) Performance and Confirmation Sampling Plan

The services to be provided by Wightman Petrie Environmental will conform to all activities detailed in the RWP and the NRQP. These tasks will be described in detail in subsequent sections of our submittal.



SECTION II

WPE SERVICE CAPABILITIES

Wightman Petrie Environmental, Inc. (WPE) is a full service environmental consulting firm with extensive experience in performing site investigations, feasibility studies for evaluating remedial alternatives, remedial design and implementation. Established in Elkhart in 1992, Wightman Petrie Environmental, Inc. has grown to be considered one of the premiere environmental service organizations throughout the northern Indiana and southern Michigan area. The company's steady growth over the years is attributed to our high rate of satisfied customers and referrals by clients that have come to expect the best. As a direct result of our recent growth and need for additional space, WPE recently (2002) relocated its offices to South Bend's Studebaker – Oliver Development Area, where we continue to offer a full range of environmental services that include:

- Spill Control and Response Plans
- Underground Storage Tank Removal/Closure
- Soil/Groundwater Sampling and Analysis
- Feasibility Study of Remedial Alternatives
- Corrective Action Plans/Remedial Action Plans
- Remedial Design/Implementation
- Hazardous Waste Characterization/Disposal



WPE specializes in, and is a preferred consultant for performing site assessments/hazardous materials investigations for local government entities, real estate developers, and are an approved consultant for numerous area lending institutions. WPE has been extremely active in providing environmental expertise to many northern Indiana municipalities (City of Elkhart, Town of Walkerton, City of Goshen, Elkhart County, City of Nappanee, City of South Bend, etc.) in the application for and implementation of Brownfield Grants. Each Brownfield Grant requires the preparation of site specific sampling plans that address potential areas of contamination as a result of historical operations. Such operations may have involved the use of hazardous materials and/or the presence of underground storage tanks. In many instances our assessment activities result in the of Environmental impacts requiring follow-up actions that may include some form of remedial action. As such, WPE has a long and established history of working with the regulatory agencies, are keenly aware of the requirements detailing specifics for actions to be taken, and are knowledgeable in the criteria for establishing site specific clean-up goals under existing regulations (i.e. Risk-Integrated System of Clean-up-RISC).

SECTION III
PROFESSIONAL STAFF
And
CONTRACTED SERVICES

Professional Staff and Contracted Services

WPE's professional staff has the education, professional certifications, project experience, and qualifications to provide the City of South Bend with the highest quality engineering services that meet or exceed client expectations with respect to technical capabilities, quality of deliverables and cost-effectiveness. Our staff includes Professional Engineers, Professional Geologists, Hydrogeologists, and Environmental Scientists. The ability to draw upon this concentrated pool of expertise and experience allows WPE to effectively manage projects simultaneously, with each project being managed at the highest level of quality and efficiency.

Resumes for key WPE personnel and associated Subcontractors are enclosed in Appendix B.

Mr. Don MacDonell, CHMM currently serves as President of WPE and manages all operations for WPE. Mr. MacDonell has significant experience in performing and managing environmental site assessments, hazardous waste investigations, soil and groundwater investigations and remediation, and asbestos inspection. Mr. MacDonell will serve as the Project Manager for this project, and will be responsible for review of all project related documents, with direct feedback to the Project Manager. Mr. MacDonell will also be in direct contact with designated City of South Bend and Hull Associates staff members on a periodic basis to ensure that the services being provided are consistent with City of South Bend's expectations, and WPE's internal expectations for quality and timeliness.

Mr. Conley Phifer will serve as Project Manager for the project. Mr. Phifer will be responsible for directing all aspects of WPE's Environmental Services, serve as the main point of contact to INDOT, and be responsible for the assignment of technical staff in support of "the Project". Mr. Phifer, a Certified Hazardous Materials Manager (CHMM) and Certified Indoor Environmentalist (CIE), has more than 20 years of environmental consulting experience. Mr. Phifer has extensive experience working on hazardous materials spill response and remediation oversight services for the U.S. EPA. Prior to joining WPE in 2001, Mr. Phifer served as the Environmental Services Business Unit Leader and Senior Project Manager for LAW Engineering and Environmental's Atlanta, Georgia Office (1997 through 2001), responsible for a staff of more than 20 environmental professionals specializing in Brownfields Re-Development, Phase I/II Environmental Site Assessments and environmental remediation projects. Mr. Phifer also has managed numerous Spill Prevention and Hazardous Materials Cleanup Sites and been directly involved in the development of Corrective Action Plans.



Professional Staff and Contracted Services

Mr. Kevin Whetham, a Professional Engineer, will assist Mr. Phifer in the overall coordination of site prioritization, field services in performing Phase II assessments, well and UST Closure Reports.

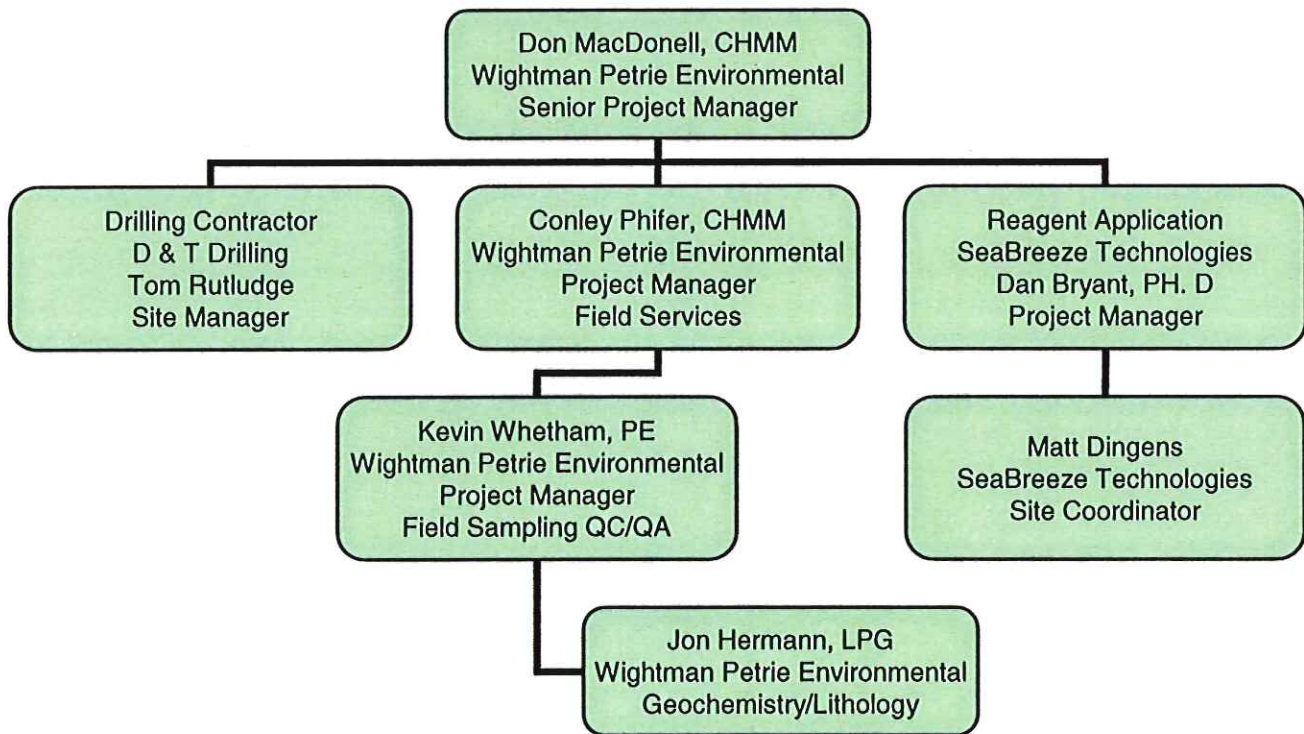
Mr. Jon Hermann, a Professional Geologist will assist in management of the hydrogeologic investigations, cost estimation, as well as assisting in evaluating the technical feasibility of remediation alternatives.

WPE's remaining staff of environmental scientists and technicians will be responsible for assisting in the collection of field data, initial information gathering and report preparation.

All of the aforementioned professional staff is 40-hour OSHA Hazardous Waste Operations (HAZWOPER) certified in accordance with the requirements of OSHA 29 CFR 1910.120. Additionally all of the senior staff assigned to this project has been directly involved with conducting public information meetings with the presentation of enhanced graphics, discussion of regulatory action levels, remedial alternatives and summarization of recommendations/conclusions.



In-Situ Oxidation Allied Stamping Plant Organizational Flow Chart



REAGENT APPLICATION SUBCONTRACTOR

SeaBreeze Technologies, LLC.
1042 Hague Road, Ste. E
Fishers, Indiana 46038
(317) 570-4919

SeaBreeze Technologies, LLC. is an innovative remediation firm with experience on over 50 in-situ oxidation remediation sites throughout the United States. SeaBreeze has conducted numerous Bench and Pilot tests, and remediation applications for chlorinated solvent contaminated sites.



DRILLING SERVICES

D & T Environmental Drilling Services
10489 McKinley Highway
Osceola, Indiana 46561
(574) 675-0930
Mr. Tom Rutledge

D & T Drilling Services, a local small business enterprise, was incorporated in December 1994 as Top Flight Drilling Services. D & T maintains an Indiana Well Driller's License, and its staff includes seven drilling personnel, four of which are "licensed well drillers". Capabilities of D & T include three hollow-stem rotary drill rigs, all of which are operated by senior drillers. One of the hollow-stem rigs is considered an all-terrain vehicle (track) capable of entering areas that would typically not support wheel-mounted vehicles. D & T also maintains support vehicles capable of decontamination and well development.

D & T has an extensive history with providing area consultants, local municipalities and private concerns with drilling services. Such projects have included drilling services for the assessment agencies of the Studebaker Corridor, the City of South Bend Landfill, and the South Wellfield Project for the U.S. Army Corps of Engineers.

Wightman Petrie Environmental has a long history of utilizing Top Flight/D & T Drilling Services in support of our Phase II Environmental Site Assessments, UST Closures and Geotechnical Investigations. Through the years we have become impressed with their timeliness of service, professional staff and cost-effectiveness in the completion of their assigned tasks.



LABORATORY SERVICES

Brighton Analytical, LLC
2105 Pless Drive
Brighton, Michigan 48114
(810) 229-7575
Mr. Jeff Topolski

Brighton Analytical, LLC, began operations in April 1986, offering chemical analyses of environmental samples for drinking water, ground water, wastewater, soil, air and other media. Brighton Analytical is a privately owned, small business enterprise that staffs 20 full-time employees.

Brighton Analytical's listing of certifications and registrations is extensive and includes the following:

Environmental Protection Agency-Water Pollution Performance Evaluations
Environmental Protection Agency- Water Supply Performance Evaluations
State of Michigan Department of Environmental Quality-Drinking Water and
Radiological Protection Division Certification
American Industrial Hygiene Association- Lead Proficiency Analytical Testing
Laboratory Quality Services-ISO 9000 Audited

Brighton Analytical adheres to the policy and procedures for operation as established by written Hazard Communication Plan, Standard Operating Procedures Manual, and a Quality Assurance Project Plan (QAPP). Procedures for performing all laboratory analysis are consistent with published U.S. EPA Standard Methods, American Industrial Hygiene Methods and ASTM Methods. Brighton Analytical participates in blind performance evaluations on a semi-annual basis for the analysis of water supply (drinking water) and water pollution components. Capabilities include analysis of samples via gas chromatography (GC), gas chromatography/mass spectroscopy (GC/MS), inductively coupled plasma (ICP) and inductively coupled plasma/mass spectroscopy (ICP/MS).

The staff of Brighton Analytical includes eleven degreed Chemists and supporting technical and administrative personnel.

Standard Turnaround for sample analysis is 5-7 days from date of receipt by the laboratory, with expedited turnaround up to 24-48 hours available on special request.

Wightman Petrie Environmental has extensively utilized the services of Brighton Analytical in performing laboratory analysis of environmental samples. Their capabilities and commitment to meeting or exceeding turnaround times, QA/QC procedures and overall quality of deliverables are an essential component in reporting of potential environmental liabilities, with confidence, to our clients.



SECTION IV

TECHNICAL APPROACH

For

REQUESTED SERVICES

Tasks 1 – Monitoring/Reagent Well Installation

The nine (9) groundwater monitoring wells will be installed with the appropriate screen depths (18' to 33', 33' to 43' or 43' to 53' bgs). Soil samples will be continuously sampled at each location, logged, and screened with a photoionization detector (PID).

The ten (10) reagent application wells will be installed to ensure that the treatment zone radius will be adequate for the apparent source area. All wells will be surveyed to the overall site plan by a Licensed Indiana Surveyor. Soil cuttings and well purge waters will be disposed of per Local, State and Federal guidelines.

Tasks 2 – Baseline Assessment

One (1) sample from each well will be analyzed for VOCs and additional parameters such as temperatures, pH, specific conductance, oxidation/reduction potential, dissolved oxygen. QC/QA samples such as field and trip blanks, and duplicates will also be collected at the required frequency detailed in the QAPP. This data will assist WPE and our Reagent Subcontractor, SeaBreeze Technologies, to estimate treatment radii for the wells and evaluate the possible need for additional application wells. All the sampling and analysis to be conducted on the project shall adhere to the guidelines and requirements in the Hull RWP and QAPP documents.

Task 3 – Bench Testing

WPE and SeaBreeze propose the use of sodium permanganate in lieu of the proposed oxidative compounds (Fenton's reaction bicarbonate compounds) detailed in the RWP and NRQP. The rationale for the change is as follows:

- 1) Sodium permanganate is insensitive to groundwater pH and alkalinity. The Fenton's reagent requires mildly acidic conditions and a ferrous iron catalyst. The bicarbonate to be utilized will likely create alkaline conditions that may oxidize and precipitate the ferrous iron catalyst.
- 2) Sodium permanganate has a much longer lifetime in the subsurface which can address any residual VOCs that might remain in fine-grained soils.
- 3) Permanganate oxidation does not create the exothermic heat and off-gas generation the Fenton's reagent creates.
- 4) The permanganate reagent will arrive on-site as a liquid and will only require dilution prior to injection eliminating the need for additional equipment and the Bench Testing will assist of the goals and tasks:

Goals

- 1) Determine the natural oxidant demand of the soil.

- 2) Demonstrate that sodium permanganate will effectively oxidize the target VOCs in the presence of natural aquifer materials.
- 3) Assess the Rate of VOC destination in the treatment area.

Tasks

- 1) Four (4) experiments will be conducted – 3 Oxidant experiments and one (1) control experiment.
- 2) Samples of the supernatant and impacted soils will be collected and analyzed by an independent laboratory to confirm the destruction of the target VOC.

Task 4 – Pilot Testing/Reagent Application

Given the source area is not definitively delineated horizontally, our treatment will consist of an treatment area approximately 45' wide x 45' long x 30' deep. Based upon the bench scale testing, we design a treatment plan for this finite area/volume of contamination. Other areas on the site may require further delineation and treatment the costs for which are not included in this proposal. The oxidative reagent will be injected into the ten (10) application wells at approximately 25 psi over a 7 day injection period. The enclosed proposal includes pricing for two (2) injections and a price for additional treatments, if needed.

Task 5 – Report Findings

The results of the post sampling and analysis will be compiled and submitted and will include the following site geology/hydrogeology descriptions, boring/well logs, base map, water contour map, VOC distribution, bench testing details, and pilot test results. A Performance and Conformation Sampling Plan and Completion Report will also be completed per the NRQP requirements. Wightman Petrie Environmental will also develop the web interface database to allow City personnel and IDEM to access the project data, as needed.



SECTION V
COST PROPOSAL

**CITY OF SOUTH BEND
IN-SITU OXIDATION, ALLIED STAMPING PLANT
SOUTH BEND, IN**

COST PROPOSAL

Pre-Design Engineering Activities	\$ 10,000.00
Monitoring/Application Wells	
Monitoring Wells	\$ 16,600.00
Application Wells	\$ 18,000.00
Bench Testing	\$ 15,000.00
Reagent Application	
1 st Application	\$ 65,000.00
2 nd Application	\$ 65,000.00
Each Additional Application - \$65,000.00	
Field Services	
Baseline Sampling, Post Treatment, Operation/ Maintenance Sampling – Two Year Sampling Program	\$ 18,000.00
Analytical Costs	
Baseline Sampling	
33 Samples for VOCs EPA SW-846, Iron, Sulfate, TOC, Total Dissolved Solids @ \$115/sample	\$ 3,795.00
Includes QAPP QC/QA Samples	
Post Treatment	
33 Samples for VOCs EPA SW-846, Iron, Sulfate, TOC, Total Dissolved Solids @ \$115/sample	\$ 3,795.00
Includes QAPP QC/QA Samples	
Post Second Treatment, if required	
33 Samples for VOCs EPA SW-846, Iron, Sulfate, TOC, Total Dissolved Solids @ \$115/sample (\$3,795.00)	
Includes QAPP QC/QA Samples	
Performance/Confirming Sampling/Analysis	
8 Quarters @ \$33/samples for VOCs EPA SW-846 Method 8260 B 264 Samples @ \$69/sample	\$ 18,216.00
Web Interface/Software	
Design/Management	\$ <u>2,000.00</u>
 TOTAL NOT-TO-EXCEED COST	 \$235,406.00



PROJECT LIMITATION

The above detailed remediation costs apply only to the described treatment zone. The VOCs contamination in the treatment area will be lowered to below VRP Tier II Non-Residential levels. Since the site is not clearly delineated, however, contamination from an upgradient source may migrate over time to impact the monitoring and application wells within the treatment zone. Areas outside the treatment zone may require additional delineation and treatment the costs of which are not included in this proposal. This proposal should not be construed as a remedial solution for other areas of the Allied Stamping site.



APPENDIX A

PROJECT PARTNER

SEA BREEZE TECHNOLOGIES. LLC

Wightman Petrie Environmental will partner with SeaBreeze Technologies, LLC (offices in Howell, NJ and Fishers, IN) to complete the required requested services. The task breakdown for the project is as follows:

Wightman Petrie Environmental will complete the following tasks:

Task 1 – GW/Application Planning and Installation

Task 2 – Baseline GW Sampling/Analysis

Task 4 – Management of Reagent Application Process/Analysis/Reporting

Task 5 – Report Findings

SeaBreeze Technologies will complete the following tasks:

Task 3 – Bench Scale Testing, including VOC Destruction Analysis

Task 4 – Pilot/Reagent Injection

In association with our Project Partners, SeaBreeze Technologies, we have provided engineering services for projects similar to Allied Stamping Plant project as detailed by the following projects:

- A. **City of Elkhart – JA Drive/High/Clark Streets, TCE/DCE Contamination (2003-2004).** Wightman Petrie Environmental design and implemented a in-situ remediation solution by implementing and reductive dechlorination for groundwater contaminated by chlorinated solvents (TCE, DCE). Initial remediation progress monitoring, indicates significant reduction in contaminant levels.

- B. **Weldon Spring Site Remedial Action Project/St. Charles, MO (2001-2002).** Designed, proposed, implemented, and managed laboratory bench scale testing and field pilot test of in-situ permanganate chemical oxidation treatment of chlorinated hydrocarbons in a fractured limestone bedrock aquifer at this Department of Energy facility. Negotiated partnering arrangement with a major environmental consulting firm for onsite construction and site supervision. GCI's contract values for the bench and field pilot tests totaled approximately \$177,000. The DOE has solicited a full-scale project design and costing based upon the successful pilot test, with the implementation portion totaling approximately \$2.0 million (pending).

- C. **Private Industrial Client/Hoboken, Belgium (2005).** Designed, proposed and implemented pilot scale in situ chemical oxidation program utilizing sodium permanganate in former drycleaner site in city neighborhood. Injection conducted inside of building. Total contract value approximately \$55,000 USD.

- D. **NAS Pensacola/Pensacola, FL (1999).** Conceptually designed, proposed, and supported a technology demonstration of Fenton's reagent for the Navy. Contract value totaled approximately \$166,000.





SeaBreeze Technologies, LLC
Innovative Environmental Solutions

**ALCOA - Silgan
Phase II Subsurface Investigation
Richmond, Indiana**

Name of Client: ALCOA, Inc.
Contract Number: 1001-0005-00; 01; 02; 03
Type of Contract: Investigation
Contract Amount: \$175,000
Period of Contract Performance: 2004 & 2005
SeaBreeze's Role: Serve as prime contractor for multiple subsurface investigations and installation of sub slab ventilation system.

Scope of Project:

Conducted a subsurface investigation to determine if manufacturing operations resulted in impacts to the soil and groundwater. The investigation included the placement of Geoprobe borings and the installation of monitoring wells as the site. In an effort to reduce waste during the investigation, SeaBreeze utilized sonic drilling techniques. This method is two to three times faster than conventional methods and generates 70%-80% less waste material.

Soil and groundwater samples were collected and analyzed for volatile organic compounds. Results of the investigation indicated subsurface soil and groundwater was impacted with chlorinated solvents. Results also indicated that subsurface impacts were potentially migrating offsite.

Preventative measures implemented to minimize potential exposure to near by business. SeaBreeze coordinated the installation of a sub slab ventilation systems to prevent the intrusion of vapors into the facility. The client also requested SeaBreeze to conduct an offsite investigation to delineate the extent of the plume migration.

Extent and Type of Work Subcontracted: Drilling services provided by PROSONIC Drilling, Geoprobe services provided by Dukes Earth Services, laboratory services provided by Pace Analytical

Client Point of Contact:	<i>Name:</i>	Mr. Robert Prezbindowski
	<i>Title:</i>	Alcoa, Inc. Corporate – Remediation Work Group Project Manager
	<i>Address:</i>	2300 North Wright Road Alcoa, Tennessee 37701-2516
	<i>Phone No.:</i>	865-977-3811



SeaBreeze Technologies, LLC
Innovative Environmental Solutions

**ALCOA – FORMER BERRIEN TOOL & DIE FACILITY
REMEDICATION OF CHLORINATED HYDROCARBONS
Eau Claire, Michigan**

Name of Client: ALCOA, Inc. – Former Berrien Tool & Die Facility
Contract Number: 1001-0002-00; 01; 02; 03; 04; 05; 06; 07; 08; 09; 10; 11; & 12
Type of Contract: In situ Chlorinated Hydrocarbon Remediation Program
Contract Amount: \$230,000+ (on-going O&M Services)
Period of Contract Performance: 2002-2004
SeaBreeze's Role: Manage NPDES Permit; Operation & Maintenance of Groundwater Extraction System; Bench Test of ISCO; Reductive Dechlorination Full-scale Pilot Study; Regulatory Support; Pump Test and Evaluation; Feasibility Study; and Interim Remedial Action Plan Preparation and Implementation.

Scope of Project: Obtain and manage NPDES permit for project site. Obtain MDEQ Operator's Certification to operate the groundwater extraction and treatment system using carbon absorbers to treat chlorinated hydrocarbons. Perform on-going operation and maintenance of the extraction system including management of RCRA F001 hazardous waste. Manage monthly discharge monitoring reports with the MDEQ E2 electronic filing system. Completed aquifer tests to assess the ability of the site to receive soil and groundwater remediation amendments. Completed a bench-scale pilot study to evaluate the use of in situ chemical oxidation to treat the source area. Developed a feasibility study for technical and cost evaluations of alternative remediation approaches. Developed a work plan and implemented a full-scale pilot test for reductive dechlorination using CAP18™, a novel bioremediation substrate. Developed work plan for innovative soil-mixing application of potassium permanganate for source reduction. Supported the client at meetings with the MDEQ to present alternative technologies for in situ treatment of chlorinated hydrocarbons.



Extent and Type of Work Subcontracted: Supply of carbon absorption canisters for use in the groundwater extraction and treatment system (Tetrasolv). Supply of CAP18™ reductive dechlorination chemical amendment for groundwater remediation (DBI Remediation Products, LLC).

Client Point of Contact:	<i>Name:</i>	Mr. Robert Prezbindowski
	<i>Title:</i>	Alcoa, Inc. Corporate – Remediation Work Group Project Manager
	<i>Address:</i>	2300 North Wright Road Alcoa, Tennessee 37701-2516
	<i>Phone No.:</i>	865-977-3811

APPENDIX B

PROFESSIONAL STAFF

RESUMES

DONALD MACDONELL

Education:

Marquette University
B.S.-Biology, 1985
Indiana University at South Bend
M.B.A., 1995

Professional Affiliations/Certifications:

Certified Hazardous Materials Manager
40-hour HazWoper Training
U.S. Army Corps of Engineers- Wetland
Delineation Training
Underground Storage Tank Consultant (IN)
Accredited Asbestos Building Inspector (IN)
Accredited Lead Inspector (IN)

Experience:

Mr. MacDonell has managed a wide range of environmental projects during his more than 15 years of experience in the field. Prior to joining Wightman Petrie Environmental, he worked as a government regulator for environmental compliance and as a Field Analyst for Chemical Waste Management. Mr. MacDonell has supervised projects involving environmental site assessments (Phase I's), hazardous waste management, wastewater disposal, soil and groundwater testing, computer modeling, wetland determinations, underground storage tank removal, closure and remediation and asbestos. **Mr. MacDonell has completed the appropriate training and is certified as an Underground Storage Tank Consultant in Indiana.** As a Certified Hazardous Materials Manager, Mr. MacDonell has been directly involved in hazardous waste management planning for industry and has manager numerous projects involving the assessment and remediation of sites contaminated with various hazardous wastes.

Mr. MacDonell directly supervises all environmental projects for Wightman Petrie Environmental. Through his vast experience, Mr. MacDonell has developed an understanding of the environmental regulations as they relate to environmental assessment and has developed a strong relationship with many of the regulators through previous interaction on various projects. It is this experience that gives Mr. MacDonell the ability to effectively manage and coordinate projects such as those associated with this INDOT contract.

CONLEY B. PHIFER

Education: Purdue University
B.S.-Environmental Health, 1979
University of Pittsburgh
M.S.-Industrial Hygiene, 1985

Professional Affiliations/ Certifications: Certified Hazardous Materials Manager
Certified Indoor Environmentalist
40-hour HazWoper Training

Experience:

Mr. Phifer has more than 20 years of professional environmental consulting experience. Mr. Phifer's experience includes serving as Department Manager/Senior Project Manager for environmental site assessments for commercial and industrial properties throughout the United States. In this capacity, Mr. Phifer has performed or had direct responsibility for management more than 1000 Phase I/II Environmental site assessments of varying degrees of complexity. Mr. Phifer also served as Environmental Consultant/Project Manager for numerous EPA Region IV Alternative Remedial Contracting Service (ARCS) sites. Specific projects have included performing Remedial Investigation/Feasibility Studies (RI/FS), Remedial Designs (RD) and Remedial Actions (RA) for several EPA "Superfund" sites in the southeastern United States. Mr. Phifer served as Technical Assistance Team (TAT) Leader for a dedicated EPA Region IV contract involved with emergency response and removal activities at sites involving the release or threat of release of hazardous materials. Mr. Phifer has assisted numerous industrial clients in the management of hazardous wastes (assessment, RCRA closure, remediation) and underground storage tank systems (assessment, removal remediation, closure).

KEVIN L. WHETHAM, P.E.

Education: Purdue University
B.S.-Environmental Engineering, 1996

Professional Affiliations/Certifications: Professional Engineer
Indiana #10200117
Michigan #6201051357
40-hour HazWoper Training
Certified Superstructure Concrete Technician

Experience:

Mr. Whetham has a wide range of environmental experience. Prior to joining Wightman Petrie Environmental, Inc. he worked as a project manager for Safety and Environmental Resources, Inc. (SER) in Mishawaka, Indiana. With SER, Mr. Whetham oversaw projects involving hazardous waste disposal, environmental site assessments, soil and groundwater testing, leaking underground storage tank assessments, corrective action, emergency response, and air permitting.

Since joining Wightman Petrie Environmental, Inc., Mr. Whetham has managed projects involving environmental site assessments, soil and groundwater testing, leaking underground storage tanks, and corrective action plans. Mr. Whetham has also managed projects involving the State of Indiana's Risk Integrated System of Closure (RISC), the Indiana Voluntary Remediation Program, and the Indiana Brownfield Grant Program.

In addition to environmental projects, Mr. Whetham has managed numerous material testing projects utilizing Indiana Department of Transportation (INDOT) specifications from a Quality Control perspective. His duties on such projects have included field technician training, supervision and scheduling, quality control test report review and approval, and testing laboratory management and supervision. Mr. Whetham has also written numerous Quality Control Plans for INDOT road construction projects.



SeaBreeze Technologies, LLC

James Daniel Bryant Principal Geologist

Certifications OSHA 40-hour Hazardous Waste Operations and Emergency Response
OSHA 8-hour Refresher, Hazardous Waste Operations and Emergency Response
OSHA 8-hour Hazardous Waste Site Supervisor

Missouri Registered Geologist #2002022740 (ASBOG certified for state reciprocity)
Indiana Registered Geologist #2122

Education Ph. D., Department of Geological Sciences, Columbia University, 1995.
M. Phil., Department of Geological Sciences, Columbia University, 1993.
M. Sc., Department of Geology, University of Florida, 1990.
B. Sc., Department of Geology, University of Florida, 1988.

Professional History

2002-present *Principal Geologist, SeaBreeze Technologies, LLC.*

- Partner and cofounder of firm specializing in innovative remedial project design and implementation.
- Responsible for site evaluations, cost proposal preparation, and full project design for application of innovative in-situ remediation technologies.
- Prepare technical deliverables and representation for clients and regulators.

1997-2002 *Senior Geologist, Geo-Cleanse International, Inc.*

- Responsible for site evaluations, cost proposal preparation, and full project design for international application of innovative in-situ chemical oxidation remediation technologies.
- Development of innovative new technologies, including permanganate injection and in-situ treatment methods for heavy metals.
- Prepare all technical deliverables for clients and regulators, including work plans, health and safety plans, laboratory bench test reports, and post-treatment reports, detailing field and/or laboratory operations, observations, and treatment results.
- Conduct and supervise all aspects of fieldwork, including well installation, soil and groundwater sampling, and field treatment program.
- Manage laboratory for treatment bench testing and for research and development of new remediation technologies. Responsibilities include development and maintenance of chemical hygiene plan, chemical storage and handling, training, and research on novel remediation methods.
- Act as a primary technical representative for the company, including sales presentations, client meetings, and as a participant at industry conferences.
- Obtained DoD research funding to develop in-situ metals and explosives treatment technologies.

1995-1997 *Postdoctoral Research Associate, Department of Geosciences, Princeton University.*

- Responsible for storage and disposal of hazardous chemicals and lab packs, and lab compliance with OSHA- and university-mandated hazardous materials regulations.
- Responsible for daily operation of a geochemistry laboratory, including budget control, sample analyses, scheduling, instruction and maintenance.
- Supervised student research, training, safety, and advisement on multiple research projects; provide daily guidance for completion of laboratory research goals.
- Developed and independently funded a novel research program on coral stable isotope proxy records of Atlantic hurricane frequency, and maintained active research in fossil chemistry.

1991-1995 *Graduate Research Fellow, Department of Geosciences, Columbia University.*

- Research focus on chemical evidence of ancient climates and environments preserved in fossils.



SeaBreeze Technologies, LLC

- Demonstrated independence in developing and funding research projects, managing budgets and prioritizing goals.
- Wrote two successful U.S. National Science Foundation research grant proposals and five student research proposals totaling \$199,000.
- Organized a research symposium at an international meeting, including symposium proposal, participant solicitation and publication of results.
- Field geology experience in Mongolia, Chile and U.S.

1990-1991 *Graduate Faculty Alumni Fellow, Columbia University.*

- Awarded a competitive, one-year fellowship to begin dissertation research.

1988-1990 *American Chemical Society Fellow, Florida Museum of Natural History.*

- Awarded a competitive, two-year fellowship for master's degree research.
- Wrote two successful student research proposals.
- R.J. Britt Award for Outstanding Graduate Student (1990).
- Field experience in Florida, Nebraska and California.

Patent

"In-Situ Chemical Reduction and Precipitation of Hexavalent Chromium in Groundwater" Provisional Patent Application filed October 2000, Full Application filed April 2001.

Refereed Journal Articles

- MacFadden, B.J., Bryant, J.D., and Mueller, P.A. 1991. Sr-isotopic, paleomagnetic, and biostratigraphic calibration of horse evolution: Evidence from the Miocene of Florida. *Geology*, v. 19, p. 242-245.
- Bryant, J.D. 1991. Age-frequency profiles of micromammals and population dynamics of *Proheteromys floridanus* (Rodentia) from the early Miocene Thomas Farm site, Florida (U.S.A.). *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 85, p. 1-14.
- Bryant, J.D. 1991. New early Barstovian (Middle Miocene) vertebrates from the upper Torreya Formation, eastern Florida panhandle. *Journal of Vertebrate Paleontology*, v. 11, p. 472-489.
- Bryant, J.D., MacFadden, B.J., and Mueller, P.A. 1992. Improved chronologic resolution of the Hawthorn and the Alum Bluff Groups in northern Florida: Implications for Miocene chronostratigraphy. *Geological Society of America Bulletin*, v. 104, p. 208-211.
- Bryant, J.D., Luz, B., and Froelich, P.N. 1994. Oxygen isotope composition of fossil horse tooth phosphate as a record of continental paleoclimate. *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 107, p. 303-316.
- Bryant, J.D., Jones, D.S., and Mueller, P.A. 1995. Influence of freshwater flux on $^{87}\text{Sr}/^{86}\text{Sr}$ chronostratigraphy in marginal marine environments and dating of vertebrate and invertebrate faunas. *Journal of Paleontology*, v. 69, p. 1-6.
- Bryant, J.D., and Froelich, P.N. 1995. A model of oxygen isotope fractionation in body water of large mammals. *Geochimica et Cosmochimica Acta*, v. 59, p. 4523-4537.
- Bryant, J.D., and McKenna, M.C. 1995. Cranial anatomy and phylogenetic position of *Tsaganomys altaicus* (Mammalia: Rodentia) from the Hsanda Gol Formation (Oligocene), Mongolia. *American Museum Novitates*, no. 3156, 42 pages.
- Bryant, J.D., and Froelich, P.N. 1996. Oxygen isotope composition of human tooth enamel from medieval Greenland: Linking climate and society: Comment. *Geology*, v. 24, p. 477-478.
- Bryant, J.D., Froelich, P.N., Showers, W.J., and Genna, B.J. 1996. A tale of two quarries: Biologic and taphonomic signatures in the oxygen isotope composition of tooth enamel phosphate from modern and Miocene equids. *Palaos*, v. 11, p. 397-408.
- Bryant, J.D., Froelich, P.N., Showers, W.J., and Genna, B.J. 1996. Biologic and climatic signals in the oxygen isotopic composition of Eocene-Oligocene equid enamel phosphate. *Palaeogeography, Palaeoclimatology, Palaeoecology*, v. 126, p. 75-89.
- Bryant, J.D., Koch, P.L., Froelich, P.N., Showers, W.J., and Genna, B.J. 1996. Oxygen isotope partitioning between phosphate and carbonate in mammalian apatite. *Geochimica et Cosmochimica Acta*, v. 60, p. 5145-5148.



SeaBreeze Technologies, LLC

Mathew M. Dingens Senior Technology Marketing Manager

Certifications OSHA 40-hour Hazardous Waste Operations and Emergency Response
OSHA 8-hour Refresher, Hazardous Waste Operations and Emergency Response

Education 1984-1988 University of Notre Dame South Bend, IN

- B.A., Arts and Letters, Psychology / Business.
- Served on the Dorm President Council
- Received Rev. Edward Morrissey Leadership Award
- Full Athletic Scholarship (Football)

Professional History

2000-present *President, Envirox LLC, DBI Remediation Products, LLC & European Remediation Technologies*

- Partner and co-founder of firm specializing in *in situ* chemical oxidation and other innovative remedial options.
- Partner and co-founder of firm that developed, manufactures and distributes a new bio stimulant for bio remediation.
- Partner and co-founder of a firm that is bringing in situ chemical oxidation process to Europe.
- Responsible for site evaluations, cost proposal preparation, and full project design for application of innovative in-situ remediation technologies.
- Approve technical deliverables and representation for clients and regulators.
- Represent company as presenter at trade shows and meetings.

1998 – 2000 *Vice President Sales, Geo-Cleanse International, Inc*

1996 – 1998 *General Manager, Geo-Cleanse International, Inc*

1995 – 1996 *Operations Manager, Geo-Cleanse International, Inc.*

- Responsible for site evaluations, cost proposal preparation, and full project design for international application of innovative in-situ chemical oxidation remediation technologies.
- Assisted in development of innovative new technologies, including permanganate injection and in-situ treatment methods for heavy metals.
- Oversaw the production of all technical deliverables for clients and regulators, including work plans, health and safety plans, laboratory bench test reports, and post-treatment reports, detailing field and/or laboratory operations, observations, and treatment results.
- Conduct and supervise all aspects of fieldwork, including well installation, soil and groundwater sampling, and field treatment program.
- Act as a primary technical and sales representative for the company, including sales presentations, client meetings, and as a participant at industry conferences.
- Assisted in Obtaining DOD research funding to develop in-situ metals and explosives treatment technologies.

1993 - 1995 *Account Executive, Rhone Poulenc Rover Pharmaceuticals*

- Achieved 100% of Quota for Asthma medications.
- Rookie of the Year.

1988 - 1993 *Account Executive, Maersk Inc..*

- Member of Management Training Program
- Managed the Sale of Coffee, Cocoa & Tea trades during expansion of service into South America.