

Section A Acknowledgement Form

Section B Transmittal Letter

Section C Technical Response

Subject 1 Organization Overview

CDM	1
CDM Services	2
Excellence in Program and Project Management.....	4
Quality Management is Our First Priority	4
CDM: Committed to Safety	5
Capabilities and Experience with Public Participation Programs	5
CDM Staff	7
CDM Project Team Organizational Overview.....	7
IMC – Water Treatment	7
PENN PRO – Water Treatment	8
Moretrench – Earthwork, HDPE and Drain, and Grassing	8
COMANCO Liner Installer	9
QuietEarth - Regulatory Compliance and Operations Consultant.....	9
CDM: A Leader – Local Presence	9
CDM Domestic and International Presence.....	11

Subject 2 Organizational Chart

Officers and Senior Management Personnel.....	1
Current Organizational Chart of CDM Constructors Inc.	1
Project Personnel Organizational Chart	2
CDM Team Organizational Chart	2

Subject 3 Resume/Experience of Personnel

Employee Approach.....	1
Officer-in-Charge	
Richard A. Slovarp, CDM, Officer-in-Charge.....	2
Team Leader	
John Brafford, CDM, Team Leader	3
Dean Carter, P.E., CDM, Project Manager	4
Operations Assigned Staff	
Paul Roberts, CDM, Facilities Project Manager.....	4
Craig A. Kovach, P.G., QuietEarth, Consultant	5
Michael A. Cruz, CDM, Assistant Project Manager	5
Wayne Winner, CDM, Project Superintendent	6
Jason Mills P.G. CDM Project Geologist.....	6
Stephen M. Robinson, CDM Health and Safety Director.....	6
CDM Technical Review /QA/QC Team	
Donald M. Thompson, Ph.D., P.E., CDM, Technical Review Committee	7
Richard D. Moore, P.E., DEE, CDM, Technical Review Committee	7
Lee P. Wiseman, P.E., DEE, CDM, Technical Review Committee.....	8

Water Treatment Assigned Staff

Dr. Vaughn V. Astley, IMC, Water Treatment Technology Leader	8
Dr. Van Nortwick Jr., Ph.D., P.E., IMC, Water Treatment Regulatory Specialist.....	9
Kenneth Jardine, IMC, Senior Water Treatment Process Engineer	9
Jerry Lister, IMC, Supervisor of Water Treatment.....	10
Dennis Michalski, IMC, Senior Water Treatment Process Engineer	10
William N. Futch, IMC, Operations Manager	10
Johnny M. Prewitt, IMC, Gypsum Stacks Operations Manager	11
John O'Connor, PENN PRO, Process Project Engineering Manager	11
Vince Margiotti, PENN PRO, Process Chemical Engineer	11
Jim Pardee, PENN PRO, Process Senior Project Manager	12
Richard Hardy, PENN PRO, Mechanical Engineer	12
Bob Herz, PENN PRO, Process Project Manager	12
Richard Chruszez, PENN PRO, Senior Electrical Engineer.....	12
Steve Moody, PENN PRO, Structural Engineering Manager	13

Liner Assigned Staff

Tommy Topp, CEC, Liner Sr. Project Manager	13
Joe Benz, CEC, Liner Project Manager.....	13
Dragan Milosavljevic, CEC, Liner Project Superintendent.....	14
Todd Kirkman, CEC, Field Supervisor	14
Stuart Taylor, CEC, Liner Field Supervisor	14

Earthwork, HDPE Pipe and Drain, Grassing Assigned Staff

Al Schuman, MES, Senior Project Manager	15
Michael Panny, MES, Project Manager.....	15
Paul Davis, MES, Superintendent	16

Resumes

Subject 4 Qualifications of Respondent in Meeting Areas of Expertise Needed

A. Operator Qualifications	1
B. Team Leader Qualifications.....	6
C. Water Treatment Contractor Qualifications.....	7
D. Liner Contractor Qualifications.....	13
E. Earthwork Contractor Qualifications	21
F. HDPE Pipe and Drain Subcontractor Qualifications.....	25
G. Grassing Contractor or Subcontractor Qualifications	27

Subject 5 Detailed Project Proposal/Scope of Work

A. Facility O&M, including Gyp Stack Systems and Ponds	1
1. Site Operation & Maintenance.....	1
2. Site Security and Safety Compliance.....	1
3. Groundwater Monitoring Plan Implementation.....	2
4. Surface Water Monitoring Plan Implementation.....	2
5. Project Coordination, Direction & Reporting	2
Project Coordination Meeting	2
Weekly Construction Meetings	3
B. Process Water Consumption	3

Water Consumption Plan for Piney Point Closure	3
Phase 1	3
Phase 2	3
Phase 3	7
C. Closure Construction	9
Closure of New Gyp Stack South	10
Site Preparation and Dewatering	10
Gypsum Earthwork	10
HDPE Liner Installation	11
Cover Soil Placement	11
Grassing	12
Closure of Gyp Stack Side Slopes	12
Closure of Cooling Ponds and Aeration Basins	13
Construction of Lined Runoff Collection Ditches and Seepage Drains	13
Stormwater Detention Ponds	13
Outlet Structure Construction	14
Disposal of Plant Scale	14
D. Closure Sequence and Closure Schedule	14
Phase 1	15
Phase 2	16
Phase 3	16
E. Innovative Proposal Opportunities for Piney Point Water Management, Site Operations, and Site Development	16
Manatee County Agricultural Reuse Supply	16
UCPM	17
Moretrench	18
IMC and PENNPRO	19
Levine Fricke Recon	19
 Section 6 Technology and Support	
Electronic Communication of Documentation	1
Computer Capabilities	1
Earthwork and Liner Technologies	1
Championing Membrane Technologies	2
Treatability Studies to Meet New Technical Challenges	3
Creative and Innovative Technologies	4
Libby Asbestos Survey Project	4
Hartsfield-Jackson Atlanta International Airport Environmental Programs Database Application	4
CDM Comprehensive GIS Services	5
Leaders in the Field	5
GIS Program Management and Technical Assistance	5
 Subject 7 Business Processes	
Quality Assurance/Quality Control	1
Management Philosophy	1
Technical Review Committee (TRC)	2

Planning	2
Project Communications.....	3
Progress Reporting	3
Client Reviews.....	3
Computerized Cost Controls	4
Management of Subcontractors	4
Contract Data Management Information System	5

Subject 8 Subcontractor Support

IMC Global Inc.	1
PENN PRO, Inc.	1
QuietEarth Consultants, Inc.	1
COMANCO Environmental Corporation	2
Moretrench Environmental Services, Inc.	2

Subject 9 Proposed Pricing

Subject 10 Attachment E Client Reference Forms

Names Respondent Has Operated Under Since July 1999.	1
Client #1 – Universal City Property Management, III LLC – Design-Build-Operate of UCPM South Campus, Orlando, Florida	2
Client #2 – Sarasota County Government – Bee Ridge Landfill Closure, Sarasota County, Florida	4
Client #3 – Alcoa - Design, Construction, and Expansion of Secure Landfill, Maseena, New York	5

Subject 11 Insurance Program

Proposed Environmental Impairment Liability Insurance Coverage	1
Available Insurance Coverage Outline.....	2
Proposed Insurance Coverage Outline.....	3
Additional Insurance Considerations for this Project	3
Description of Insurance Program and Evidence of Coverage	4

Subject 12 Performance Bonds

Subject 13 Graphics /Technical Drawings

CDM Team Personnel Organizational Chart.....	1
Project Schedule	2

Section D Respondent/ Subcontractor Summary Form

Section E Subcontractor Documentation

Quiet Earth.....	1
IMC	2
PENNPRO.....	3
COMANCO	4
Moretrench.....	5

Figures and Tables

Fig. 1 – Process Water Treatment Flow Diagram.....Section C-Subject 5, p. 4

Fig. 2 – R.O. Output for 20 lbs/day Total NH₃-N Loadings.....Section C-Subject 5, p. 8

Fig. 3 – Piney Point Water TreatmentSection C-Subject 5, p. 8

Table 1 – Lime Plant Sludge from R.O. Reject Treatment.....Section C-Subject 5, p.4

Table 2 – Typical Reverse Osmosis Reject.....Section C-Subject 5, p. 5

Table 3 – Typical Reverse Osmosis Permeate.....Section C-Subject 5, p. 6

Table 5 – Water Treatment Capacity.....Section C-Subject 5, p. 7

SUBMIT PROPOSAL TO:

Department of Environmental Protection
Procurement Section, Carr Building, Room 235
3900 Commonwealth Boulevard, MS#93
Tallahassee, Florida 32399-3000
Telephone Number: 850-245-2361

Page 1 of 79
RESPONSES WILL BE OPENED: Thursday, September 2, 2004 at 2:00 p.m. EDT
and may not be withdrawn within 180 days after such date and time.
NEGOTIATION NO: 2005002C

AGENCY MAILING DATE: July 16, 2004
TITLE: Closure of the Piney Point Phosphogypsum Stack System

STATE PURCHASING SUBSYSTEM (SPURS) VENDOR NUMBER F043163397001

VENDOR NAME:

CDM Constructors Inc.

VENDOR MAILING ADDRESS:

2301 Maitland Center Parkway, Ste. 300

CITY - STATE - ZIP:

Maitland, Florida 32751

AREA CODE
(407)

PHONE NUMBER: 660-2552

FREE NUMBER:

REASON FOR NO PROPOSAL:

POSTING OF NEGOTIATION TABULATIONS

Bid tabulations with recommended awards will be posted for review by interested parties at the location where bids were opened and will remain posted for a period of 72 hours. Failure to file a protest within the time prescribed in Section 120.57(3), Florida Statutes or failure to post the bond or other security required by law within the time allowed for filing a bond shall constitute a waiver of proceedings under Chapter 120, Florida Statutes.

Posting will be on or about:

October 4, 2004

I certify that this negotiation is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a proposal for the same materials, supplies or equipment, and is in all respects fair and without collusion or fraud. I agree to abide by all conditions of this negotiation and certify that I am authorized to sign this response and that the offer is in compliance with all requirements of the Invitation to Negotiate, including but not limited to, certification requirements. In conducting negotiations with an agency for the State of Florida, respondent offers and agrees that if this negotiation is accepted, the respondent will convey, sell, assign or transfer to the State of Florida all rights, title and interest in and to all causes of action it may now or hereafter acquire under the Anti-trust laws of the United States and the State of Florida for price fixing relating to the particular commodities or services purchased or acquired by the State of Florida. At the State's discretion, such assignment shall be made and become effective at the time the purchasing agency tenders final payment to the respondent.

AUTHORIZED SIGNATURE (MANUAL)

Richard A. Slovarp, Vice President
AUTHORIZED SIGNATURE/TITLE (TYPED)

GENERAL CONDITIONS

- NEGOTIATION:** Negotiation must contain a manual signature of authorized representative in the space provided above. Negotiation must be typed or printed in ink. Use of erasable ink is not permitted. All corrections made by proposer to the price must be initialed. The company name and SPURS vendor number shall appear on each page as required. Complete ordering instructions must be submitted with the negotiation. If you are not a registered vendor with the Department of Management Services, contact State Purchasing, 4050 Esplanade Way, Suite 360, Tallahassee, FL 32399-0950, (850) 487-4634 immediately.
- NO RESPONSE:** If not submitting a negotiation package, respond by returning only this invitation to Negotiate acknowledgment form, marking it "NO RESPONSE" and explain the reason in the space provided above. Failure to respond to a procurement solicitation without giving justifiable reason for such failure, non-conformance to contract conditions, or other pertinent factors deemed reasonable and valid shall be cause for removal of the supplier's name from the mailing list. NOTE: To qualify as a respondent, proposer must submit a "NO RESPONSE", and it must be received no later than the stated proposal opening date and hour.
- PRICES, TERMS AND PAYMENT:** Firm prices shall be quoted and include all packing, handling, shipping charges and delivery to any point within the State of Florida.
 - TAXES:** The State of Florida does not pay Federal Excise and Sales taxes on direct purchases of tangible personal property. See tax exemption number on face of purchase order. This exemption does not apply to purchases of tangible personal property made by contractors who use the tangible personal property in the performance of contracts for the improvement of state owned real property as defined in Chapter 192, F.S.
 - CASH DISCOUNTS:** Cash discounts for prompt payment shall not be considered in determining the lowest net cost for proposal evaluation purposes.
 - MISTAKES:** Proposers are expected to examine the specifications, delivery schedule, proposal prices, and all instructions pertaining to supplies and services. Failure to do so will be at proposer's risk. In case of mistake in extension the unit price will govern in award.
 - CONDITION AND PACKAGING:** It is understood and agreed that any item offered or shipped as a result of this negotiation shall be new (current model available at the time of this negotiation). All containers shall be suitable for storage or shipment, and all prices shall include standard commercial packaging.
 - SAFETY STANDARDS:** Unless otherwise stipulated in the negotiation, all manufactured items and fabricated assemblies shall comply with applicable requirements of Occupational Safety and Health Act and any standards thereunder.
 - INVOICING AND PAYMENT:** The contractor shall be paid upon submission of properly certified invoices to the purchaser at the prices stipulated on the contract at the time the order is placed, after delivery and acceptance of goods, less deductions if any, as provided. Invoices shall contain the contract number, purchase order number and the contractors SPURS vendor number. An original and three (3) copies of the invoice shall be submitted. Failure to follow these instructions may result in delay in processing invoices for payment.

INTEREST PENALTIES: Payment shall be made in accordance with Section 215.422, F.S., which states the contractor's rights and the State agency's responsibilities concerning interest penalties and time limits for payment of invoices. **VENDOR RESPONSE SYSTEM:** To access an interactive Voice Response System for vendor payment inquiry, Vendors may call (850) 413-7269 between 7 a.m. and 6 p.m. Monday through Friday to check on the status of payments by State agencies. The system can accommodate English and Spanish speaking callers. **VENDOR OMBUDSMAN:** Vendors providing goods and services to an agency should be aware of the following time frames. Upon receipt, an agency has five (5) working days to inspect and approve the goods and services, unless the bid specifications, purchase order or contract specifies otherwise. An agency has twenty (20) days to deliver a request for payment (voucher) to the Department of Banking and Finance. The 20 days are measured from the latter of the date the invoice is received or the goods or services are received, inspected and approved. If a payment is not available within 40 days, a separate interest penalty set by the Comptroller pursuant to Section 55.03 F. S., will be due and payable, in addition to the invoice amount, to the vendor. To obtain the applicable interest rate, contact the agency purchasing office. The interest penalty provision applies after a 35 day time period to health care providers, as defined by rule. Interest penalties of less than one (1) dollar will not be enforced unless the vendor requests payment. Invoices which have been returned to a vendor because of vendor preparation errors will result in a delay in the payment. The invoice payment requirements do not start until a proper and correct invoice is provided to the agency. A Vendor Ombudsman has been established within the Department of Banking and Finance. The duties of this individual include acting as an advocate of vendors who may be experiencing problems in obtaining timely payment(s) from a State agency. The Vendor Ombudsman may be contacted at (850) 488-2924 or by calling the State Comptrollers Hotline, 1-800-848-3792. State Purchasing shall review the conditions and circumstances surrounding non-payment, and unless there is a bona fide dispute, State Purchasing may, in writing, authorize the contract supplier to reject and return purchase orders from said agency until such time as the agency complies with the provisions of Section 215.422 F.S.

- g) **ANNUAL APPROPRIATIONS:** The State of Florida's performance and obligation to pay under this contract is contingent upon an annual appropriation by the Legislature.

4. **MANUFACTURERS NAME AND APPROVED EQUIVALENTS:** Any manufacturers names, trade names, brand names, information and/or catalog numbers listed in a specification are for information and not intended to limit competition. The bidder may offer any brand for which he is an authorized representative, which meets or exceeds the specifications for any item(s). **MEASUREMENTS:** Customary measurements appearing in the specifications are not intended to preclude bids for commodities with metric measurements. If bids are based on equivalent products, indicate, on the bid form the manufacturers name and number. Bidder shall submit with his bid cuts, sketches, and descriptive literature, and/or complete specifications. Reference to literature submitted with a previous bid will not satisfy this provision. The State of Florida reserves the right to determine acceptance of item(s) as an approved equivalent. Bids which do not comply with these requirements are subject to rejection. Bids lacking any written indication of intent to bid an alternate brand will be received and considered in complete compliance with the specifications as listed on the bid form. The purchaser is to be notified of any proposed changes in (a) materials used, (b) manufacturing process, or (c) construction. However, changes shall not be binding upon the State unless evidenced by Change Notice issued and signed by the State.



2301 Maitland Center Parkway, Suite 300
Maitland, Florida 32751
tel: 407 660-2552
fax: 407 875-1161

RECEIVED
DEP PROCUREMENT
04 SEP 10 AM 11:58

September 10, 2004

Ms. Shelly Kelley
Procurement Section, Room 235
3800 Commonwealth Boulevard, MS93
Tallahassee, Florida 32399-3000

Subject: Solicitation Number: 2005002C, Invitation to Negotiate (ITN)
Closure of the Piney Point Phosphogypsum Stack System

5. **INTERPRETATIONS/DISPUTES:** Any questions concerning conditions and specifications shall be directed in writing to this office for receipt no later than ten (10) days prior to the negotiation opening. Inquiries must reference the date of the negotiation opening and the negotiation number. No interpretation shall be considered binding unless provided in writing by the State of Florida in response to request in full compliance with this provision. Any person who is adversely affected by an Agency decision or intended decision concerning a procurement solicitation or contract award who wants to protest such decision or intended decision shall file a protest in accordance with Chapter 28-110, Florida Administrative Code. Failure to file a protest within the time prescribed in Section 120.57(3), F.S., or failure to post the bond other security required by law within the time allowed for filing a bond shall constitute a waiver of proceedings under Chapter 120, F.S.
6. **NOTICE OF NEGOTIATION PROTEST BONDING REQUIREMENT:** Any person who files an action protesting a decision or intended decision pertaining to contracts administered by State Purchasing or a State agency pursuant to Section 120.57(3), F.S., shall post with State Purchasing or a State agency at the time of filing the formal written protest, or within the 10-day period allowed for filing the formal written protest, a bond payable to State Purchasing or the State agency in an amount equal to 1 percent of State Purchasing or State agency's estimate of the total volume of the contract or \$5000, whichever is less, which bond shall be conditioned upon the payment of all costs which may be adjudged against him in the administrative hearing in which the action is brought and in any subsequent appellate court proceeding. For protest of decisions or intended decisions of State Purchasing pertaining to agencies requests for approval of exceptional purchases, the bond shall be in the amount equal to 1 percent of the requesting agency's estimate of the contract amount for the exceptional purchase requested or \$5000, whichever is less. In lieu of a bond State Purchasing or the State agency may, in either case, accept a cashier's check or money order in the amount of the bond. **FAILURE TO FILE A PROPER BOND AT THE REQUIRED TIME WILL RESULT IN A DENIAL OF THE PROTEST.**
7. **CONFLICT OF INTEREST:** The award hereunder is subject to the provisions of Chapter 112, F.S. Proposers must disclose with their proposal the name of any officer, director, or agent who is also an employee of the State of Florida, or any of its agencies. Further, all proposers must disclose the name of any State employee who owns, directly or indirectly, an interest of five percent (5%) or more in the bidder's firm or any of its branches.
8. **AWARDS:** As the best interest of the State may require, the right is reserved to make award(s) by individual item, group of items, all or none, or a combination thereof; on a geographical district basis and/or on a statewide basis with one or more suppliers; to reject any and all negotiations or waive any minor irregularity or technicality in any response received. When it is determined there is competition to the lowest responsible respondent, evaluation of other responses is not required. Respondents are cautioned to make no assumptions unless their response has been evaluated as being responsive. All awards made as a result of this negotiation shall conform to applicable Florida Statutes.
19. **NONCONFORMANCE TO CONTRACT CONDITIONS:** Items may be tested for compliance with specifications by the Florida Department of Agriculture and Consumer Services, or by others acceptable to the State. Should the items fail testing, the State may require the vendor to reimburse the State for costs incurred by the state in connection with the examination or testing of the commodity including costs relating to transporting the commodity samples to the testing site, actual test costs, personnel costs and other applicable costs. The data derived from any tests for compliance with specifications and public records and open to examination thereto in accordance with Chapter 119, F.S. Items delivered not conforming to specifications may be rejected and returned at vendor's expense. These items and items not delivered as per delivery date in negotiation and/or purchase order may result in contractor being found in default in which event any and all procurement costs may be charged against the defaulting contractor. Any violation of these stipulations may also result in:
 - a) Suppliers name being removed from state Purchasing vendor mailing list.
 - b) All State departments being advised not to do business with supplier without written approval from State Purchasing until such time as supplier reimburses the State for all procurement and cover costs.
10. **INSPECTION, ACCEPTANCE AND TITLE:** Inspection and acceptance will be at destination unless otherwise provided. Title and risk of loss or damage to all items shall be the responsibility of the contract supplier until accepted by the ordering agency, unless loss or damage results from negligence by the ordering agency. The contract supplier shall be responsible for filling, processing and collecting all damage claims. However, to assist him in the expeditious handling of damage claims, the ordering agency will:
 - a) Record any evidence of visible damage on all copies of the delivering carriers Bill of Lading.
 - b) Report damage (Visible and Concealed) to the carrier and contract supplier, confirming such reports, in writing within 15 days of delivery, requesting that the carrier inspect the damaged merchandise.
 - c) Provide the contract supplier with a copy of the carriers Bill of Lading and damage inspection report.
11. **GOVERNMENTAL RESTRICTIONS:** In the event any governmental restrictions may be imposed which would necessitate alteration of the material, quality, workmanship or performance of the items offered on this bid prior to their delivery, it shall be the responsibility of the supplier to notify the State at once, indicating in a letter the specific regulation which required an alteration. The State reserves the right to accept any such alteration, including any price adjustments occasioned thereby, or to cancel the contract at no further expense to the State.
12. **LEGAL REQUIREMENTS:** Applicable provisions of all Federal, State, county and local laws, and all ordinances, rules and regulations shall govern development, submittal and evaluation of responses received in response hereto and shall govern any and all claims and disputes which may arise between person(s) submitting a response hereto and the State of Florida, by and through its officers, employees and authorized representatives, or any other person, natural or otherwise, and lack of knowledge by any bidder shall not constitute a cognizable defense against the legal effect thereof
13. **PATENTS AND ROYALTIES:** The respondent, without exception, shall indemnify and save harmless the purchaser and its employees from liability of any nature or kind, including cost and expenses for or on account of any copyrighted, patented, or unpatented invention, process or article manufactured or supplied by the contractor. The contractor has no liability when such claim is solely and exclusively due to the combination, operation or use of any article supplied hereunder with equipment or data not supplied by contractor or is based solely and exclusively upon the States alteration of the article. The purchaser will provide prompt written notification of a claim of copyright or patent infringement and will afford the bidder full opportunity to defend the action and control the defense. Further, if such a claim is made or is pending the contractor may, at its options and expenses procure for the purchaser the right to continue use of, replace or modify the article to render it noninfringing. (If none of the alternatives are reasonably available, the State agrees to return the article on request to the contractor and receive reimbursement, if any, as may be determined by a court of competent jurisdiction.) If the contractor uses any design, device, or materials covered by letters, patent or copyright, it is mutually agreed and understood without exception that the bid prices shall include all royalties or costs arising from the use of such design, device or materials in any way involved in the work.
14. **PRICE ADJUSTMENTS:** Any price decrease effectuated during the contract period by reason of market change shall be passed on to the State of Florida. This shall also apply to all in-place equipment on rent or lease plan. Price increases are not acceptable.
15. **CANCELLATION:** All contract obligations shall prevail for at least one hundred eighty (180) days after effective date of the contract. Also, cancellation may be required in accordance with Section 287.042(2)(b) and (c), F.S. In addition to the provisions of the Renewal Paragraph, the protection of both parties, this contract may be canceled in whole or in part by either party by giving thirty (30) days notice in writing to the other party.
16. **RENEWAL:** The Purchaser reserves the option to renew the period of this contract or any portion thereof, for an additional term not to exceed the original contract period unless the original contract period is 24 months or less in which case the contract may be renewed up to 2 one year periods. Renewal of the contract period shall be by mutual agreement in writing.
17. **ADVERTISING:** In submitting a response, respondent agrees not to use the results therefrom as part of any commercial advertising.
18. **ASSIGNMENT:** Any Purchase Order issued pursuant to this negotiation and the monies which may become due hereunder are not assignable except with the prior written approval of the ordering agency. State Purchasing or State agency may assign the resulting contract upon mutual consent.
19. **LIABILITY:** The supplier shall hold and save the State of Florida, its officers, agents, and employees harmless against claims by third parties resulting from the supplier's breach of this contract or the supplier's negligence.
20. **FACILITIES:** The State reserves the right to inspect the bidders facilities at any reasonable time with prior notice.
21. **THE SUCCESSFUL RESPONDENT(S) MUST PROVIDE:** A copy of any product literature and price list, in excellent quality black image on white paper.
22. **ADDITION/DELETION OF ITEMS:** The State of Florida reserves the right to add to or delete any item from this negotiation or resulting contract when deemed to be in the State's best interest.
23. **ORDERING INSTRUCTIONS:** Manufacturers are encouraged to negotiate direct naming dealers who will accept orders and complete deliveries. Respondent must include complete detailed ordering instructions, including SPURS vendor number(s) for invoicing dealers on the negotiation form provided.
24. **PUBLIC PRINTING:** A respondent must have at the time of negotiation a manufacturing plant in operation which is capable of producing the items negotiated and so certify upon request of the agency. Every agency of the State, including agencies within the legislative and judicial branches of government, shall give preference to respondents located within the State when awarding contracts to have materials printed, whenever such printing can be done at no greater expense than, and at a level of quality comparable to that obtainable from a respondent located outside the State.
25. **PUBLIC RECORDS:** Any materials submitted in response to this invitation to bid will become a public document pursuant to Section 119.07, F.S. This includes material which the responding bidder might consider to be confidential or a trade secret. Any claim of the confidentiality is waived upon submission, effective after opening pursuant to Section 119.07, F.S.

**See additional Special Conditions contained on
page 3 of Attachment A.**

NOTES:

ANY AND ALL SPECIAL CONDITIONS AND SPECIFICATIONS ATTACHED HERETO WHICH VARY FROM THESE GENERAL CONDITIONS SHALL HAVE PRECEDENCE. THIS SHEET AND THE ACCOMPANYING NEGOTIATION DOCUMENTS CONSTITUTE AN OFFER FROM THE RESPONDENT. IF ANY OR ALL PARTS OF THE NEGOTIATION ARE ACCEPTED BY THE AGENCY REPRESENTATIVE AN AUTHORIZED REPRESENTATIVE OF STATE PURCHASING OF THE DEPARTMENT OF MANAGEMENT SERVICES SHALL AFFIX HIS SIGNATURE HERETO, AND THIS SHALL THEN CONSTITUTE THE WRITTEN AGREEMENT BETWEEN PARTIES. THE CONDITIONS OF THIS FORM BECOME A PART OF THE WRITTEN AGREEMENT BETWEEN THE PARTIES.

STATE OF FLORIDA

BY: _____ DATE: _____	CONTRACT NUMBER: _____ EFFECTIVE: _____ THROUGH _____
--------------------------	--

26. **GENERAL CONDITION NO. 3(f) IS MODIFIED AS FOLLOWS:** All references to the Department of Banking and Finance are hereby replaced with the Department of Financial Services. Telephone numbers for the Vendor Ombudsman are (850) 410-9724 or 1-800-848-3792.

GENERAL CONDITION NO. 8 IS MODIFIED AS FOLLOWS: Effective July 1, 2002, Section 287.042(2)(c), Florida Statute has been modified to change the amount of the protest bond to one percent (1%) of the estimated contract amount with NO MAXIMUM limit established.

28. **RENEWAL: THIS SECTION SUPERCEDES GENERAL CONDITION #16.** The Department of Environmental Protection reserves the right to renew any and all contracts resulting from this solicitation. Renewal shall be subject to the terms and conditions set forth in the existing contract (excluding the compensation level of the contract) and may be renewed for a period that may not exceed three (3) years or the term of the original contract, whichever period is longer. Renewal of the contract shall be based upon satisfactory performance by the contractor and the availability of funding.

29. **ADDITON OR DELETION OF TERMS AND CONDITIONS:** No addition or deletion of the terms or conditions included with the proposal response shall be evaluated or considered and any and all such revisions shall have no force and effect and are inapplicable to this bid. If submitted either purposely through intent or design or inadvertently appearing separately in transmittal letters, specifications, literature, price lists or warranties, it is understood and agreed the general and special conditions in this solicitation are the only conditions applicable to this proposal and the proposer's authorized signature affixed to the acknowledgment form attests to this.

30. **UNILATERAL CANCELLATION:** Any Contract resulting from this solicitation may be unilaterally canceled by the Department for refusal by the Contractor to allow public access to all documents, papers, letters, or other material made or received by the Contractor in conjunction with the Contract, unless the records are exempt from Section 24(a) of Article I of the State constitution and Section 119.07(1), Florida Statutes.

31. **UNAUTHORIZED ALIENS:** The employment of unauthorized aliens by any contractor/vendor is considered a violation of Section 274A(a) of the Immigration and Nationality Act. If the Contractor/Vendor knowingly employs unauthorized aliens, such violation shall be cause for unilateral cancellation of the contract resulting from this solicitation.

32. **DISCLOSURES:** Information will be disclosed to respondents in accordance with State statutes and rules applicable to this solicitation after evaluations are complete.

33. **DEFAULT:** Failure to perform according to this solicitation and/or resulting contract shall be cause for your firm to be found in default in which event any and all procurement costs may be charged against your firm. Any violations of these stipulations may also result in:
a) Contractor's name being removed from State Purchasing vendor mailing list.
b) All State agencies being advised not to do business with the contractor without written approval from State Purchasing.

34. **AMERICANS WITH DISABILITIES ACT (ADA):** Any vendor or contractor submitting a response to the Florida Department of Environmental Protection for providing commodities or contractual services may not exclude any person(s) from participating in; deny any person(s) the proceeds or benefits of; not otherwise subject any person(s) or subcontractors to any form of discrimination based on the grounds of race, creed, color, national origin, age, sex, or disability. Any vendor or contractor which is providing commodities or contractual services, or possible subcontractor, must comply with the pertinent portion of the Americans with Disabilities Act of 1990, Public Law 101-336.

Any person with a qualified disability shall not be denied equal access and effective communication regarding any solicitation documents or the attendance at any related meeting or opening. If accommodations are needed because of a disability, please contact the Procurement Section at (850) 245-2361 at least five workdays prior to the opening.

35. **DISCRIMINATORY VENDOR LIST:** An entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity. The Florida Department of Management Services is responsible for maintaining a discriminatory vendor list and intends to post the list on its website. Questions regarding the discriminatory vendor list may be directed to the Florida Department of Management Services, Office of Supplier Diversity at (850) 487-0915.

36. **PUBLIC ENTITY CRIMES:** A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, F.S., for Category Two, for a period of 36 months from the date of being placed on the convicted vendor list.

37. **P.R.I.D.E. PROVISION:** It is expressly understood and agreed that any articles which are subject of, or required to carry out, this work described under this solicitation shall be purchased from the corporation identified under Chapter 946, Florida Statutes, if available, in the same manner and under the same procedures set forth in Section 946.515(2), (4), Florida Statutes; and for purposes of this solicitation the person, firm or other business entity carrying out the work described herein shall be deemed to be substituted for the Department of Environmental Protection insofar as dealing with such corporation. The "Corporation identified" is PRISON REHABILITATIVE INDUSTRIES AND DIVERSIFIED ENTERPRISES, INC. (P.R.I.D.E.) which may be contacted at:

P.R.I.D.E.
12425 28th Street, North
St. Petersburg, FL 33716-1826
Toll Free: 1-800-643-8459
Website: www.pridefl.com

38. **RESPECT OF FLORIDA:** It is expressly understood and agreed that any articles that are the subject of, or required to carry out, the work described under this solicitation shall be purchased from a nonprofit agency for the blind or for the severely handicapped that is qualified pursuant to Chapter 413, Florida Statutes, in the same manner and under the same procedures set forth in Section 413.036(1) and (2), Florida Statutes; and for purposes of this solicitation the person, firm, or other business entity carrying out the work described herein shall be deemed to be substituted for the Department of Environmental Protection insofar as dealing with such qualified nonprofit agency. The "nonprofit agency" identified is RESPECT OF Florida which may be contacted at:

RESPECT OF Florida
2475 Apalachee Parkway, Suite 205
Tallahassee, Florida 32301-4946
Phone: (850) 487-1471
Website: www.respectofflorida.org

39. **FORCE MAJEURE:** If a force majeure occurs which causes delays or the reasonable likelihood of delay in the achievement of the requirements of this contract, the selected vendor shall promptly notify the Department of Environmental Protection (DEP) orally and shall, within seven (7) calendar days, notify the DEP in writing of the anticipated length and cause of the delay, the measures taken or to be taken to minimize the delay, and the selected vendor's intended timetable for implementation of these measures. If the parties agree that the delay or anticipated delay has been or will be caused by a force majeure, time for performance under this contract may be extended, at the discretion of the DEP for a period of time equal to the delay resulting from the force majeure. Such agreement shall be confirmed by letter form the DEP accepting, or if necessary modifying the extension. A force majeure shall be an act of God, strike, lockout, or other industrial disturbance, act of the public enemy, war, blockade, public riot, lightning, fire, flood, explosion, failure to receive timely necessary governmental or third party approvals, governmental restraint, and any other cause, whether of the kind specifically enumerated herein or otherwise, which is not reasonably within the control of the selected vendor. The selected vendor is responsible for the performance of all services and/or provision of all commodities issued under this contract. Failure to perform by the selected vendor's subcontractor, if subcontracting is allowed, shall not constitute a force majeure event.

40. **RECYCLED CONTENT:** It is expressly understood and agreed that any products or materials which are the subject of, or are required to carry out, any Contract resulting from this solicitation, will be procured in accordance with the provisions of Section 403.7065 and Section 287.045, Florida Statutes.

Special Conditions Rev. 3/2004



2301 Maitland Center Parkway, Suite 300
Maitland, Florida 32751
tel: 407 660-2552
fax: 407 875-1161

September 10, 2004

Bureau of Mine Reclamation
Division of Water Resource Management
Florida Department of Environmental Protection (Department)
Ms. Shelly Kelley
Procurement Section, Room 235
3800 Commonwealth Boulevard, MS93
Tallahassee, Florida 32399-3000

Subject: Solicitation Number: 2005002C
Invitation to Negotiate (ITN)

Dear Ms. Kelley:

On behalf of the entire Camp Dresser & McKee organization, CDM Constructors Inc. (CDM) is pleased to submit this proposal in response to your ITN, dated July 16, 2004.

Official Contact

Mr. Richard A. Slovarp
Vice President
CDM Constructors Inc.
2301 Maitland Center Parkway, Suite 300
Maitland Florida 32751
407.660.6375
slovarpra@cdm.com

Alternate Contact

Mr. Dean Carter
Senior Project Manager
CDM Constructors Inc.
2301 Maitland Center Parkway, Suite 300
Maitland Florida 32751
407.660.6423
carterde@cdm.com

As an Officer of CDM Constructors Inc., I have the authority to bind CDM Constructors Inc. and will be available to be contacted by telephone and attend meetings, as may be appropriate regarding the solicitation schedule. CDM understands that time is of the essence in the contract negotiation process and are committed to work with the FDEP in a timely manner.

Very truly yours,

Richard A. Slovarp
Vice President
CDM Constructors Inc.

Subject 1 Organization Overview

CDM is a global, full-service consulting; engineering, construction, and operations firm helping clients improve the environment and infrastructure. An employee-owned corporation with \$633 million in annual revenues and a multi-disciplinary staff of 3,600 in over 100 offices worldwide, CDM maintains the size, stability, financial and human resources required to successfully manage and execute the Piney Point Phosphogypsum Stack Closure. Our firm is known for the integrity with which we conduct our business as evidenced by our "Core Values" statement that is published and adhered to by our staff. Two of these core values, integrity and teamwork, are critically important to the successful execution of the Piney Point Project and we will fulfill those core values throughout the life of the project.

Integrity and teamwork are critically important to the successful execution of the Piney Point project, and we will fulfill those core values throughout the life of the project.

CDM, the Respondent to this ITN and the Prime Contractor for the project, has developed an experienced and highly capable team to provide specific areas of expertise to the FDEP for the Piney Point Phosphogypsum Stack System Closure Project. A brief overview of the project organization developed by CDM is as follows:

- Operator - CDM, lead by Paul Roberts
 - QuietEarth Consultants, Inc. (QuietEarth) – Craig Kovach
- Team Leader - John Brafford
- Water Treatment – IMC Global Inc. (IMC)
 - PENN PRO, Inc. (Penn Pro)
- Liner Contractor - COMANCO Environmental Corporation (CEC)
- Earthwork, HDPE Pipe and Drain, and Grassing - Moretrench Environmental Services, Inc. (Moretrench)

Further information regarding these team members is located below and in Subjects 3 and 8 of this document. CDM and all of these team members are experienced working with Ardaman & Associates and have excellent relationships with the staff.

CDM

The firm began serving clients in 1944, when Thomas R. Camp established a consulting practice. Since then, CDM has grown to provide a full range of services, including water, wastewater, water resources, solid waste, environmental, transportation, infrastructure, and facility management to public and private clients worldwide. CDM's expansion into design/build operate services in the 1990's furthered our goal of providing full service solutions to our clients.

CDM's projects range from small, short-term solutions to complex, ongoing environmental and infrastructure management programs, but they all share a common focus: CDM's driving philosophy of providing exceptional client service and building long-term relationships. CDM's reputation for quality and excellence in the industry is confirmed by our ranking in Engineering News Record (ENR) and is highlighted by the following chart.

Our full range of comprehensive services includes architectural and engineering design, environmental management and planning, transportation, management consulting, information management, construction and operations. CDM is licensed in the State of Florida as a General Contractor and Electrical Contractor.

CDM ENR 2004 Rankings

5 th	Top 25 Water Treatment and Desalination
6 th	Top 25 Water Supply Firms
3 rd	Top 25 Sewerage/Solid Waste Firms
3 rd	Top 25 Sanitary & Storm Sewers
7 th	Top 25 Transmission Lines & Aqueducts
13 th	Top 200 Environmental Firms
16 th	Top 500 Design Firms
19 th	Top 20 Hazardous Waste

At CDM, client service means exceeding client needs and expectations by listening carefully to each client's unique concerns - technical, financial, socio-economic, and operational - every step of the way. Exceptional client service means understanding the conflicting demands of balancing infrastructure needs and environmental and public health protection with fiscal reality. And it means being flexible in project delivery by offering start-to-finish services or by supporting any individual phase of a larger program. From big-picture program and infrastructure management, to initial studies and design, through construction and operation, CDM's project teams integrate the appropriate multidisciplinary resources and streamline all efforts throughout the entire project life cycle. The result is the best total solution for each and every client.

CDM Services

CDM offers a broad range of services to regional, state, municipal, and federal agencies; industries, public and private organizations; and individuals. CDM services have supported projects ranging from small pilot-scale studies and specialized consultation to complex national projects requiring a multi-disciplined team approach. CDM staff is thoroughly experienced in all phases of engineering and environmental design and construction related to:

- Surface/groundwater hydrology, supply development, and protection
- Water supply, transmission, treatment, and distribution
- Wastewater and stormwater collection, treatment, and disposal
- Drainage, flood control, and irrigation



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- Water resources planning
- Air pollution control
- Solid and hazardous waste management
- Environmental and community planning
- Management and financial consulting
- Geographic information systems
- Utilities benchmarking and optimization
- Information management services

Our staff have extensive experience in related fields such as systems analysis methodology, complex regulatory agency and community relations, economic/financial management and planning, urban planning, regulatory implementation measures, computer applications, and environmental impact assessment. The firm is staffed and equipped to provide:

- Earthwork construction, water treatment operations, and liner installation
- Surveys, investigations, studies, and reports
- Engineering and architectural design
- Construction plans and specifications
- Environmental assessments
- Financial and management consulting
- Engineering services during construction and resident engineering
- Training/educational programs for operations, management, engineering staff
- Assistance in start-up and initial operation of new facilities
- Geotechnical consultation

Facilities design, fabrication, construction, operations and maintenance (O&M)

- Water treatment plants/related facilities
- Wastewater treatment plants/related facilities
- Stormwater facilities
- Solid waste facilities
- Industrial engineering and construction
- Plant modernization
- Process line relocation and updating
- New facility construction
- SCADA systems



***Mass excavation at the Squaw Peaks, Arizona
Solids Handling Facility***

Remedial design, fabrication, installation, construction, O&M

- Instrumentation and controls
- Upgrades and improvements

- New system installation and integration
- SCADA system installation and integration
- Project controls services
- Scheduling
- Cost estimating
- Emergency response services

Excellence in Program and Project Management

CDM is well known for providing excellent program management service to our clients. Our project managers are trained to provide effective and responsive services to clients, and effectively manage large teams of subcontractors. CDM's project management objectives at Piney Point are to:

- Keep the project costs within the established budgets
- Maintain clear channels of communication between the client and the project team by providing a single point of responsibility
- Provide appropriate, regular reporting for the project team to the client
- Within the project team, maintain direct lines of responsibility for the various work components
- Ensure timely completion of the work according to an established schedule of activities
- Provide regular checks on project technical control
- Perform with integrity and with a clear understanding of service to the FDEP

Quality Management is Our First Priority

The most important tenet of our corporate mission is commitment to project quality to all our assignments. CDM's quality management program is our way of doing business – a structured approach to improvement based on client satisfaction. It is also used to measure whether we achieve our firm's improvement goals. Our quality management program is geared to improve the following areas:

- Health and safety
- Quality of services
- Staff capability
- Productivity
- Client/Owner Satisfaction
- Reduced Exposure to Claims

For more than 50 years, CDM professionals have met the challenges of the industry. As environmental regulations have evolved and become more stringent, our expertise and national stature as environmental experts has grown. Perpetually at the forefront of technological innovation and up-to-date on all current and anticipated regulations, CDM has helped countless municipalities and public agencies, as well as some of the nation's largest companies comply with strict regulations and develop proactive environmental management programs for the future.

CDM: Committed to Safety

CDM maintains a rigorous Health and Safety Program that applies to each and every project in which we participate. CDM maintains an experience modifier rate (EMR) below industry average, and has received several awards for its outstanding safety record. In fact, CDM's Southeast Region recently received a Safety Achievement Award in recognition of achieving 4 years/1,460 Accident-Free Days.

CDM's Southeast Region recently received a Safety Achievement Award in recognition of achieving 4 years/1,460 Accident-Free Days

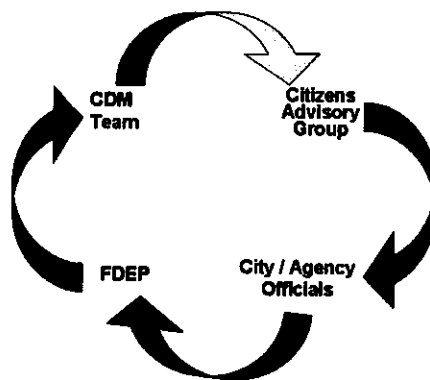
CDM's formal Health and Safety Program encompasses injury/illness prevention, safety training, new employee orientation, weekly safety meetings, communication and reporting, site inspections, responsible persons, site-specific safety procedures and hazard communication. We execute to implement project specific Health and Safety Plans for this project. CDM employees are trained in OSHA standard 1910.120 HazWoper and will comply with all MSHA, Phosphate Council and site specific training requirements.

Capabilities and Experience with Public Participation Programs

In addition to assisting industries in obtaining permits, updating or preparing management plans, managing construction subcontractors and developing financing alternatives, a consultant must be able to provide advice and insight on project-related issues important to the community.

Active public participation is often vital to the acceptance and implementation of such projects, especially if the issues are viewed as controversial such as direct discharge of treated water from the Piney Point facility. CDM has the professional skills and experience required to meet the public's right-to-know and will provide to FDEP resident public participation experts with local knowledge and contacts such as John Brafford to:

- Assess existing issues, interest groups, and opinion leaders.
- Develop creative program plans aimed at informing the general public.
- Establish truly representative committee-based leadership.
- Successfully develop and implement a consensus-building strategy.
- Expedite project progress through effective community communications.
- Resolve or defuse controversial issues and problems.



The public participation process is one of the most important tools available to local citizens who want to participate in project execution, and CDM understands and appreciates the influence that these citizens and local groups have. Our effective public participation programs are typically developed at three levels: 1) active involvement by a representative and politically-aware select group, such as a Citizens Advisory Committee, 2) a general awareness of important project issues communicated to a broader segment of the community, and 3) an education program directed towards the commercial sector that stresses the project's economic benefits.

We can establish a Citizens Advisory Group for the FDEP on the Piney Point project as the first step in the public participation process. This select group, usually made up of local citizens, decision makers and members of special interest groups, serves as a type of steering committee helping to determine areas for impact assessment and providing community insight into other alternatives. John Brafford, our Team Leader and CDM employee, will work with FDEP staff to identify and recruit members for this group and also serve as a group member to ensure all technical aspects of the project are communicated and accounted for.

Beyond the communications required with interest groups and city/agency officials, properly prepared public meetings are also necessary for successful project implementation. These meetings are very important in communicating the benefits associated with the project for the public and environmental protection of sensitive environments such as Tampa Bay and Bishops Harbor. Through proper scheduling and identification of respective audiences, CDM can assist in preparing presentations tailored to the varying needs of each sector of the community.

With an understanding that the majority of the general community will not participate in a Citizens Advisory Group or attend a public meeting, CDM works with its clients to inform this sector in more traditional ways such as publications, news releases, media publicity events, audiovisual presentations, and informational speeches. CDM services in these areas include web site development and maintenance, video script preparation and review, technical editing of brochures, fact sheets and newsletters, and appearances at schools and on community television programs.

CDM has been involved in developing public information programs for a number of years. Our experience has shown that to develop an informative and successful public education program, we must:

- Start early and be continuous.
- Establish the role, activities, and schedule of a Citizen's Advisory Committee.
- Develop informational materials.
- Use the local media.
- Define the role of project staff.



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CDM Staff

What separates CDM from other construction and engineering firms is its people. Client service is only as good as the people who commit their talents and attention to your project. The employee owners of CDM are people you can rely on, and they provide the solutions you can trust, locally and around the world.

CDM is staffed with professionals whose academic credentials, work experience, and career goals are focused on the science, engineering, construction, and operations fields.

CDM's uniformity of purpose and diversity of disciplines have created a reservoir of skills, resources, and collective experience that is both respected and unmatched in our field. We share our client's concern for safety and environmental compliance because of our many years of direct experience in contract operations of industrial utilities.

CDM Project Team Organizational Overview

CDM's teaming philosophy is to integrate our comprehensive in-house capabilities with competent, proven individuals and firms that can provide complementary services and enhance project performance for multi-disciplinary and multi-project assignments. CDM has evaluated and selected a group of highly qualified, readily available subcontractors for this project. The following information provides a listing of our subcontractors and highlights the value each firm brings to our team. Section 8 further discusses the subcontractor's capabilities. Working together, the CDM Team will provide FDEP with the full-range of services required to produce a successful project at its Piney Point facility.

IMC – Water Treatment

IMC is a global phosphate mining, fertilizer production and mineral processing company. IMC has some of the most extensive experience in the industry treating process pond, stormwater, gyp stack pore water, recovered groundwater and other water sources contaminated with a variety of inorganic compounds to allow for release to surface water or volume reduction. The treatment technologies employed by IMC are all tried and proven in the industry. These include double liming and ammonia reduction via air stripping, enhanced evaporation methods, on-site consumption via spray irrigation and evaporation, and reverse osmosis (RO) treatment.



Of special interest at the Piney Point site is IMC's capability to treat concentrated waters with RO technologies. IMC, at Florida Pines, successfully piloted and operated a RO treatment system at Piney Point in 2003 and 2004 producing 46 million gallons of permeate of which 99.74 percent met contractual specifications for discharge. Average daily permeate production exceeded 400,000 gpd. This wide range of water treatment operating experience and capability will be absolutely essential in the successful execution of this project. The IMC Water Treatment Technology team will be



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responsible for all aspects of water treatment needs evaluation, engineering, and system operation. IMC staff will most likely enhance the spray evaporation system to increase that water disposal method, optimize the double liming system through system upgrade and operational changes, work in conjunction with PENN PRO Engineering to enlarge capacity of the RO system at the facility, and explore other options such as spray irrigation for agricultural purposes and water reuse with Manatee County. In addition to IMC's primary role as water treatment contractor, IMC will utilize their extensive global experience in gypsum stack management to assist the CDM Team in the gypsum stack closure.

PENN PRO – Water Treatment

PENN PRO is a multi-disciplined full-service engineering company with a wide range of expertise and many years' experience in a variety of industries. All levels of technology are used from the very latest to the tried and true. Safety both in engineering and in implementing work is paramount. PENN PRO employees are trained in OSHA, MSHA and site specific training. Quality, safety and service are built into every project, regardless of its type or specifications.



PENN PRO will be responsible for process engineering in support of IMC on the water treatment team. PENN PRO was instrumental in the original design of the pilot system currently at the Piney Point Plant. The PENN PRO staff will be lead by John O'Connor, an engineer with over 40 years experience in the phosphate industry. John will also be assisting in the development of long-term water management and use strategies for the facility that will be beneficial to the surrounding communities.

Moretrench – Earthwork, HDPE and Drain, and Grassing

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Moretrench has served the Tampa area with the finest in civil and environmental contracting services since 1945. As a Florida licensed, general utility, and plumbing contractor, they have worked for a variety of manufacturing, utility, and phosphate industry clients across the state. Their field crews are Phosphate Council, MSHA, and OSHA safety trained; and they employ some of the finest project superintendents in Central Florida. Moretrench will perform all of the functions associated with Earthwork, HDPE Pipe and Drain work and Grassing associated with the Piney Point Phosphogypsum Stack System Closure project. Moretrench has completed dozens of these projects for every major phosphate company in Florida including Cargill, IMC, and PCS Phosphates. Moretrench has been involved with projects for Stack Closure and HDPE pipeline construction for the closed Mulberry Corporation facility under the supervision of Louis Timchak and the Cargill Corp. They will also provide these services at Piney Point. Additional qualifications and project descriptions are found in Section C, Subject 4.



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COMANCO – Liner Installer

The CDM Team has enlisted the service of COMANCO (CEC) to provide sub-consultant services for the Liner component of this project. CEC has 16 years of diverse experience and is respected as one of the nations most qualified environmental lining construction companies. CEC has built the very foundation of its company around the clients and gypsum stack projects located in Central Florida and elsewhere in the Southeast United States. Presently working for all four major phosphate processing companies in Florida, including the Piney Point facility, CEC holds the most complete understanding of Phosphogypsum Stack Lining and related Engineering QA requirements of any firm in the country.



CEC will be responsible for all aspects of installation of smooth and textured liners and soil cover on the stack system and pond closures. CEC is experienced in handling and installing geonet/geotextile composites, concrete erosion control mats, and other erosion control structures. Specific qualifications and experience of CEC and their seamers, welders, QC techs, and the designated Project Manager and Site Supervisors are found in Section C, Subject 3 of this proposal.

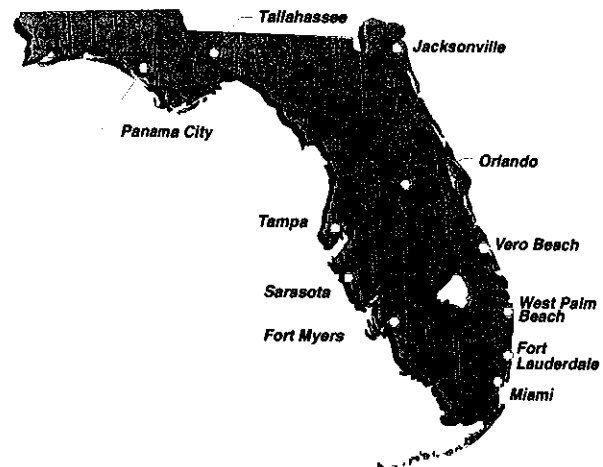
QuietEarth - Regulatory Compliance and Operations Consultant

Mr. Craig A. Kovach, president of Quiet Earth has over 17 years experience in the phosphate industry dealing with complex technical, regulatory compliance and community relations issues. His areas of specialty include phosphogypsum stack management/closure; phosphoric acid process water treatment and inventory reduction techniques; phosphate chemical plant closure, including process waste, PCB, asbestos, lead paint, and radioactive materials abatement; environmental regulatory compliance and programs; all phases and types of environmental permitting with particular expertise in surface and groundwater discharge and monitoring programs. Mr. Kovach will serve as a consultant to CDM on the Piney Point project, specifically in the assistance of Paul Roberts and John Brafford in their roles.



CDM: A Leader – Local Presence

CDM has been performing engineering services in Florida since 1974 and construction, operations and construction management since 1993. CDM serves more than 200 clients from 11 offices strategically located to provide our clients with high



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quality, locally responsive service. Our Florida offices are staffed with more than 300 professionals who are continually working to stay abreast of local, state and national regulations, and to build strong working relationships with our clients and local agencies. In Florida, sensitive environments, extreme climate and dynamic development patterns warrant local evaluation and innovative approaches. Committed to answering the needs of our clients, CDM has risen to the challenges specific to Florida and answered with innovative solutions that fit local requirements and budgets.

CDM understands that to achieve project success, community and business issues must be factored in to the overall project. Our staff works closely with clients to anticipate and plan for proactive management of community issues. For this project it should be noted that all of the primary resources supplied by CDM are within a 100 mile radius of the Piney Point operations. Services for this project will be administered through our Orlando office.

All of the primary resources supplied by CDM are within a 100 mile radius of the Piney Point operation.

Listed below are the Florida office locations for CDM.

Fort Lauderdale, FL
6365 N.W. 6th Way,
Tel: (954) 776-1731

Orlando, FL
2301 Maitland Center
Parkway, Suite 300
Tel: (407) 660-2552

Tallahassee, FL
325 John Knox Road
Building M, Suite 100
Tel: (850) 386-5277

Fort Myers, FL
9311 College Parkway,
Suite 1
Tel: (239) 432-9494

Miami, FL
800 Brickell Avenue,
Suite 710
Tel: (305) 372-7171

Tampa, FL
1715 North Westshore
Blvd., Suite 875
Tel: (813) 281-2900

Jacksonville, FL
8659 Baypine Road,
Suite 200
Tel: (904) 731-7109

Panama City, FL
701 Jenks Avenue
Tel: (850) 785-5999

Vero Beach, FL
1701 Highway A-1-A,
Suite 301
Tel: (772) 231-4301

Sarasota, FL
1819 Main Street
Suite 1002
Tel: (941) 363-9696

West Palm Beach, FL
1601 Belvedere Road,
Suite 211 South
Tel: (561) 689-3336



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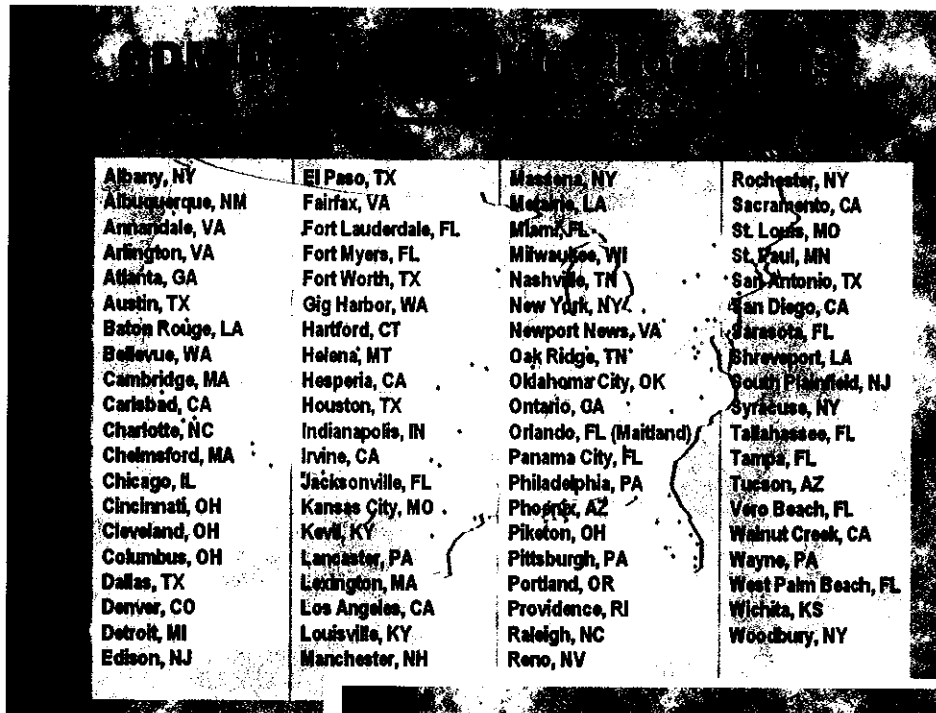


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CDM Domestic and International Presence

With a worldwide staff numbering over 3,600, linked by a wide area network through more than 100 offices in the United States and Overseas, CDM can quickly access a wealth of technical expertise ranging from traditional engineering and planning disciplines through management consultants, scientists and construction staff. Our widespread geographical base is illustrated below.



Subject 2 Organizational Chart

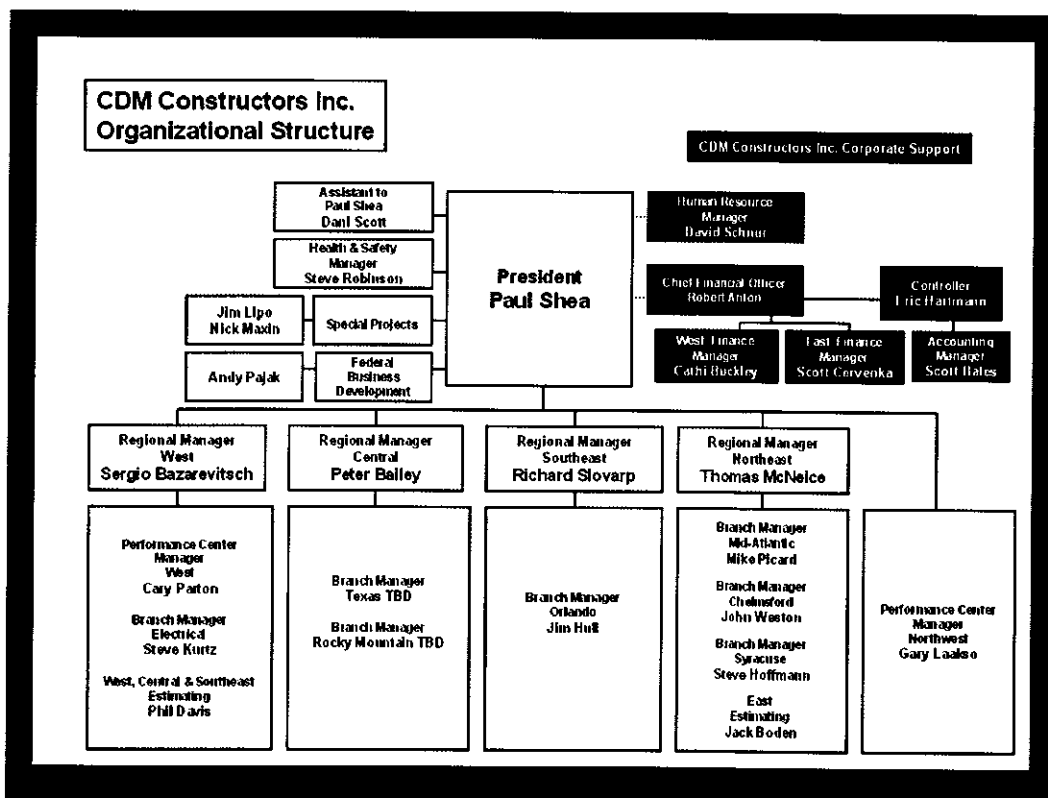
Officers and Senior Management Personnel

The table below details the officers and senior management for CDM Constructors Inc.

President: Paul R. Shea	Clerk/Secretary: Mario J. Marcaccio
Sr. Vice President: Andrew P. Pajak	Assistant Clerk/Secretary: James S. Lackman
Vice President: Thomas G. McNeice	Assistant Clerk/Secretary: J. A. Capezzuto
Vice President: Richard A. Slovarp	Assistant Clerk/Secretary: Cathi L. Buckley
Vice President: Sergio Bazarevitsch	Assistant Clerk/Secretary: Phillip A. Davis
Vice President: Peter Bailey	Assistant Clerk/Secretary: Lynell L. Scott
Treasurer: Robert J. Anton	Assistant Clerk/Secretary: Craig A. Gadberry
Assistant Treasurer: R. W. McCarthy	

Current Organizational Chart of CDM Constructors Inc.

The organizational chart below provides a current organizational chart for CDM Constructors Inc.

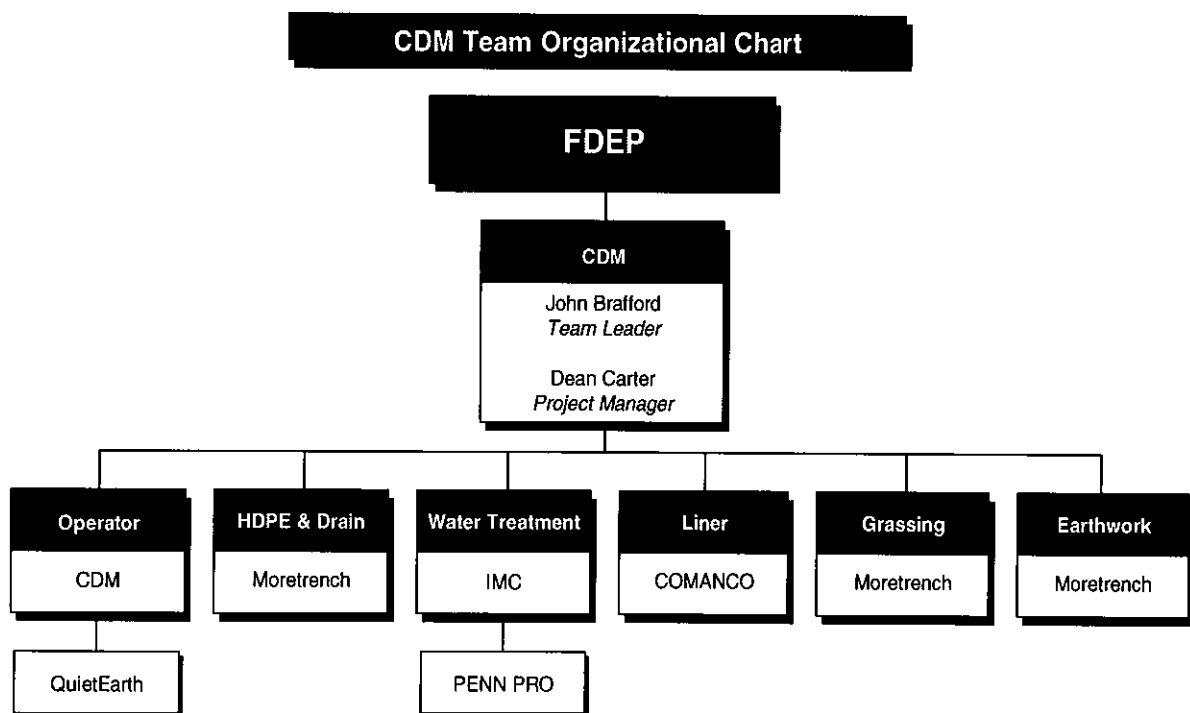


Project Personnel Organizational Chart

Due to the size of the chart, 11x17 inches and ITN Addendum 2 requirements, the Project Personnel Organizational Chart is included in Section C, Subject 13 of this submission. Please refer to this chart for an in-depth project team view.

CDM Team Organizational Chart

The following chart outlines the CDM Team that will provide services for the closure of the Piney Point Phosphogypsum Stack System project.



Subject 3 Resume/Experience of Personnel

Each of the individuals who are part of the CDM Team brings unique skills to the project, along with the ability to apply those skills successfully in a team environment. They are among the most capable, qualified and experienced people on a per-project-element basis in the environmental remedial construction and phosphate industry today. In the following pages we have provided a brief bio and a full resume for each member of the CDM Team including; executive, management, and supervisory staff and our current professional staff that we propose to have involved in this project. We have included; experience, licenses, continuing education/training, and professional designations and affiliations for each team member. As required by the ITN, we have also included awards or special recognition for sustained productivity and leadership in the resumes.

Employee Approach

CDM is committed to joining the FDEP in its efforts to minimize the adverse impacts to existing employees and minimizing employee turnover at the site. CDM proposes to offer continued employment to all current field staff during the transition of the contracts. During the transition period, CDM will provide comparable or equal salaries, positions and current levels of benefits. CDM will review the abilities of the current employees and the staffing needs of the site and will offer continued employment to those qualified to fill the identified positions.

CDM's philosophy toward employees is based on the following fundamental principals:

- We consider our employees our most valuable asset
- We provide continued employment opportunities for employees
- We develop an effective and efficient on-site staffing plan supported with high quality management
- We invest in extensive and widespread training of employees to raise skill levels and increase job opportunities
- We provide a drug-free work environment

CDM is keenly aware of the challenges involved with the transition of employees due to mergers and contract changes. We have faced the challenges posed by transitions with a great deal of understanding and sensitivity precisely because many of our present staff joined us as a result of similar transitions and are aware first-hand of the personal impact such change can have.

The success of any operation depends principally upon those individuals assigned to operate the system. We recognize that many of the current Piney Point employees came from the old Mulberry Corporation operation and have a firsthand knowledge of the nuances of the site facilities and systems. We seek to improve operations through the



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Griefarth
consultants, inc.

empowerment of employees, the application of their creativity to their job, and the provision of appropriate training. Because employees are our most important resource, we are committed to providing the education, training and cross-training we believe necessary to achieve the highest level of economy and efficiency under the safest operating conditions. CDM takes pride in maintaining an excellent relationship with its employees. CDM has built a reputation in the industry as a good place to work and is one of the industry leaders in low employee turnover. We recognize that it is expensive to train an employee and hope that employees consider their position with CDM as a career rather than a job.

CDM's management team has successfully developed and implemented many startup/transition plans. We have implemented these plans with minimal disruption of customer service or quality of service provided. The first step in a successful transition is the development and implementation of a plan to take the facility from one private contractor to a second. Our technical approach and corresponding project management and staffing are based upon our experience at other industrial facilities. Our transition team will work closely with the FDEP during the transition period to implement CDM's project approach. Members of the team will remain on site throughout the start-up/transition until all plans, programs, procedures, and O&M systems are fully implemented.

The overall project management, staffing and startup are under the direction of our Project Manager.

Officer-in-Charge

Richard A. Slovarp, CDM, Officer-in-Charge

Mr. Slovarp is the manager of CDM construction and design/build (D/B) project operations in the Southeast. He oversees all construction and design/build projects and pursuits in the region, and manages CDM's staff of estimators, schedulers, project managers, construction managers, and superintendents. He brings more than 30 years of experience to the CDM team, including expertise in both the D/B and traditional project delivery approaches. Mr. Slovarp's responsibilities have included project management, estimating, procurement, design/drafting oversight, subcontractor coordination, quality control, and business development. He has completed projects including, water and wastewater treatment plants, refineries, power plants, pipelines, and industrial buildings. His experience includes managing the Southern office of a major general contractor. Mr. Slovarp will be the Officer-in-Charge for this project and will be responsible for client satisfaction, and will ensure that CDM meets budget commitments.

Richard A. Slovarp Project Relevance

Responsible for all construction and design/build projects and pursuits in the Southeast region, and manages CDM's staff of estimators, schedulers, project managers, construction managers, and superintendents.



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FDEP should be confident that Mr. Slovarp has a team in place and is committed to have the resources available to successfully negotiate a contract and ensure project execution year after year.

Team Leader

John Brafford, CDM, Team Leader

John Brafford will serve as the Team Leader for the CDM Piney Point Phosphogypsum Stack Closure Team. He will serve as the point of contact between the Department and the CDM team and is responsible for coordination of all activities and reporting to the Department under this contract. His integrity and experience are well known and respected in the community.

His professional experience consists of 37 years of service to the phosphate industry, leading technical project engineering teams. He has extensive familiarity interfacing with public agencies and interest groups. He is knowledgeable in dealing with a variety of regulators and public entities including Polk County Commissioners, Central Florida Regional Planning Council members, staff of the Florida Dept. of Environmental Protection, news media editorial boards such as The Lakeland Ledger and The St. Petersburg Times, environmental groups such as the Audubon Society and the Sierra Club and industry organizations like Florida Institute for Phosphate Research (FIPR) and the Florida Phosphate Council (FPC). He also was an Expert Witness in several permitting hearings, and in an intervention suit brought by the environmental watchdog group Manasota-88.

Mr. Brafford is especially adept at managing diverse groups in difficult times. After the development of a sinkhole under the active gypsum stack at the IMC New Wales Plant, he was involved in development of a remediation plan with Ardaman & Assocs., and their sub-contractors. He also acted as the IMC contact person with all interested parties and the news media, including newspapers and television.

His success in interacting with environmental groups is proven by his receipt of an award from the Florida Audubon Society "For Your Lifelong Leadership in Promoting Conservation in Florida".

With the expansion of the gypsum storage area at the IMC New Wales plant, he was involved in the design, permitting, and construction of the state-of-the-art, first ever HDPE-lined gypsum stack with Ardaman & Associates as the Engineer.

John Brafford

Project Relevance

One of the leading authorities on the operation, maintenance and inspection of chemical complexes and phosphate mines.

Public relations representative and dealings with all aspects of gypsum stack closure.



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Dean Carter, P.E., CDM, Project Manager

Mr. Carter will serve as Project Manager for this project. As Project Manager, Mr. Carter will monitor and control the overall project scope, safety compliance, operations, quality assurance/quality controls, schedule and cost. It will be his responsibility to provide overall project direction, coordination and interface with the various project representatives and team members.

Mr. Carter has 22 years of construction and engineering experience on a variety of project types ranging from building construction and renovation projects to heavy construction and environmental remediation projects. He is experienced in all phases of project management, from bid preparation to project execution to final closeout. He has managed projects under various contract types, including D/B, lump sum, cost plus, and time and materials contracts. Mr. Carter's responsibilities have included estimating, procurement, subcontractor management, quality control, budget and schedule management, onsite construction supervision, design, and health and safety management. He is particularly well versed in environmental and construction regulations in Florida and the Southeast.

Dean Carter

Project Relevance

Well versed in environmental and construction regulations in Florida and the Southeast.

27 years of construction and engineering experience on a variety of project types ranging from building construction and renovation projects to heavy construction and environmental remediation projects.

Operations Assigned Staff

Paul Roberts, CDM, Facilities Project Manager

Mr. Roberts will serve as Operator and Facilities Project Manager for this project. As Operator and Facilities Project Manager, Mr. Roberts will be in charge of the overall operation and maintenance of the Gypsum Stack System. He will provide direction and coordination to field staff and team members on the operation and closure of the system.

Mr. Roberts has 41 years of demonstrated phosphate chemical plant experience operating, inspecting and maintaining active phosphogypsum stack systems and phosphogypsum stack systems undergoing closure. He progressed through operations, engineering, senior corporate staff, technology development and environmental to Operations Manager while associated with six (6) chemical plant sites, including five (5) with gypsum stacks, a phosphate mine, corporate office assignments and port facilities. He spent eight (8) years on the shutdown of a major phosphate chemical complex leading activities as follows: studies to remediate and upgrade plants within the facility to more competitive technologies, development of closure plans and permits to close a

Paul Roberts

Project Relevance

41 years of phosphate chemical plant experience.

Managed six (6) chemical plant sites, including five (5) with gypsum stacks, phosphate mine.

Eight years at a shutdown of a major phosphate chemical complex.



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major gypsum stack at the site including borrow sites, and technology development for the gypsum stack closure activities with major cost reductions with Ardaman & Associates as the Engineer.

Craig A. Kovach, P.G., QuietEarth, Regulatory Compliance and Operations Consultant

As a senior-level environmental professional with over 17 years of application in consulting and industry, Mr. Kovach's range of experience in the environmental field is extensive. His responsibilities have most recently included management and direction of environmental affairs and programs for CF Industries, Inc., one of the five (5) phosphate fertilizer producers in Florida, with facilities in Hillsborough, Polk, and Hardee Counties. From 1996 through 2003, Mr. Kovach was directly responsible for all environmental permitting and regulatory compliance for the company's 2800-acre Bartow Phosphate Complex and two (2) Port terminal facilities on Tampa Bay. The former facility is an idle processing plant that has not produced fertilizer since 1989; therefore, process water management and gypsum stack closure have comprised critical environmental program areas under Craig's management.

Craig A. Kovach

Project Relevance

Management and direction of environmental affairs and programs for CF Industries, Inc.

Directly responsible for all environmental permitting and regulatory compliance for the company's 2800-acre Bartow Phosphate Complex and two Port terminal facilities on Tampa Bay

Michael A. Cruz, CDM, Assistant Project Manager

Mr. Cruz will serve as Assistant Project Manager on this project. He will assist Mr. Carter in the day-to-day management of the site activities. He will be responsible for preparing project status reports, assisting with cost budgeting and control, schedule preparation and interfacing with the project representatives and their members.

Michael A. Cruz

Project Relevance

Mr. Cruz's responsibilities have included field supervision and management, cost estimating, procurement, schedule development and management, quality control, data management and reporting and health and safety management.

Mr. Cruz has more than 24 years of experience in consulting, remedial construction and engineering. His experience includes the development of environmental legislation both at state and federal levels, regulatory compliance consulting, (i.e. compliance auditing and permit application development, Superfund remediation under both the U.S. EPA REM and ARCS Programs, RCRA and CERLA/SARA site investigations (RI/FS) and public relations). Mr. Cruz's responsibilities have included field supervision and management, cost estimating, procurement, schedule development and management, quality control, data management and reporting and health and safety management.



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Wayne Winner, CDM, Project Superintendent

Mr. Winner will serve as Project Superintendent on this project. As Project Superintendent, he will be responsible for the day-to-day supervision of the field activities. Mr. Winner will be responsible for ensuring fieldwork is performed safely and in accordance with the project schedule and budget.

Mr. Winner is a construction superintendent with over 30 years experience in all aspects of earthwork and pipeline construction, and project supervision. He has experience with large earthwork projects including landfill construction and closures, and gypsum stack closure and maintenance. Mr. Winner has participated in and supervised emergency and planned hazardous waste remedial actions, including excavation and removal of waste-contaminated surface and subsurface soils, underground storage tank removal and cleaning, spill response, drum sampling and disposal, and recovery of oil and debris. His supervisory experience includes fulfilling OSHA requirements relative to site work and excavation, coordinating transportation and disposal of hazardous wastes, soliciting and receiving bids for services and materials, and working with clients and on-site coordinators.

Wayne Winner

Project Relevance

30 years of experience in all aspects of earthwork and pipeline construction, and project supervision.

Experience includes fulfilling OSHA requirements relative to site work and excavation, coordinating transportation and disposal of hazardous wastes.

Jason Mills P.G. CDM Project Geologist

Jason Mills has 19 years experience in environmental sampling and assessment work and is a registered Professional Geologist in Florida. He is adept at sampling both groundwater monitoring wells and surface water effluent discharges using proper FDEP 62-160 Field Sampling Methods. He attended the course for these methods in 2002 and has sampled hundreds of monitor wells and surface water stations in his career. He will oversee all crews performing sampling and site investigation activities at the Piney Point facility.

Jason Mills

Project Relevance

Adept at sampling both groundwater monitoring wells and surface water effluent discharges using proper FDEP 62-160 Field Sampling Methods

Stephen M. Robinson, CDM Health and Safety Director

Mr. Robinson has 31 years of experience coordinating and directing health and safety programs and personnel. His expertise includes writing and implementing corporate health and safety programs, performing site and facility audits, enforcing subcontractor and intra-company compliance with applicable state and federal regulations, and conducting employee health and safety training. Aside from his management duties, Mr. Robinson also has nine years of experience serving as a safety consultant for various private and public projects.

Steve Robinson

Project Relevance

Oversees the health and safety of construction projects, supervises the writing of health and safety plans, performs required OSHA training for employees and supervisors, and acts as a CDM liaison with OSHA.



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CDM Technical Review /QA/QC Team

Donald M. Thompson, Ph.D., P.E., CDM, Technical Review Committee

Dr. Thompson is an environmental engineer with 25 years of experience in water and wastewater treatment process and design with an emphasis on membrane technology. His membrane technology experience includes both low pressure (microfiltration and ultrafiltration) and high pressure (nanofiltration and reverse osmosis) membrane technologies. Dr. Thompson's services to both public and private clients for membrane technology includes pilot testing, feasibility analyses, process selection, design, construction management, and alternative project delivery including design/build. Currently Dr. Thompson serves as the Membrane Advocate for CDM with duties relating to marketing, technical oversight, and technology transfer for the various membrane technologies on a firm-wide basis.

Donald M. Thompson

Project Relevance

His membrane technology experience includes both low pressure (microfiltration and ultrafiltration) and high pressure (nanofiltration and reverse osmosis) membrane technologies.

Membrane technology includes pilot testing, feasibility analyses, process selection, design, construction management, and alternative project delivery including design/build.

Richard D. Moore, P.E., DEE, CDM, Technical Review Committee

Mr. Moore is the CDM Division Quality Manager-Florida Area. He is responsible for developing and overseeing the division's Quality Implementation Plan, including training of staff, monitoring compliance with QM procedures, and performing and overseeing independent QM audits and technical reviews for CDM's 11 Florida offices. Mr. Moore experience includes engineering and project management services related to drinking water and wastewater treatment and has more than 30 years of experience in the planning, design, and construction of major water and wastewater facilities in the United States and overseas. Mr. Moore's project involvement includes managing major utility projects in the areas of water supply, treatment, and distribution; wastewater collection, treatment, and disposal; and stormwater management.

Richard D. Moore

Project Relevance

Responsible for developing and overseeing the division's Quality Implementation Plan, including training of staff, monitoring compliance with QM procedures, and performing and overseeing independent QM audits and technical reviews for CDM's 11 Florida offices.

Most recently Mr. Moore was the Project Manager for the 66-mgd Surface Water Treatment Plant Design/Build/Operate project for Tampa Bay Water and the Project Manager for the Manatee County Water Treatment Plant (WTP) Expansion, Wellfield and Water System Improvements for the City of Venice, Florida.



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Lee P. Wiseman, P.E., DEE, CDM, Technical Review Committee

Mr. Wiseman is particularly qualified in the engineering areas of hydrogeology, groundwater modeling and monitoring, effluent reuse, contamination assessments and groundwater remediation, stormwater management/modeling, water resources, and environmental permitting. He has 19 years of experience in applying various analytical and numerical models to simulate groundwater flow, mass transport, and groundwater / surface water interaction and quality.

Since joining CDM, Mr. Wiseman has participated in several large water resources projects involving groundwater and integrated surface water use modeling. Mr. Wiseman has developed field testing programs, developed databases, and performed hydraulic analyses for the computer modeling of surface and subsurface water flow patterns for the design of water supply wells, rapid infiltration basin projects, reuse irrigation systems, and groundwater remediation systems. Lee is the lead engineer on a project utilizing 85-acres of sprayfield to consume all treated water resulting in zero discharge to a sensitive water body.

Lee P. Wiseman Project Relevance

Particularly qualified in the engineering areas of hydrogeology, groundwater modeling and monitoring, effluent reuse, contamination assessments and groundwater remediation, stormwater management/modeling, water resources, and environmental permitting.

Water Treatment Assigned Staff

The CDM Team has enlisted the services of IMC and PENN PRO to provide subcontractor services for the Water Treatment component of the ITN. We have provided below, and in the following resumes, the personnel information for the staff members of IMC and PENN PRO, that will be responsible for providing these services.

Dr. Vaughn V. Astley, IMC, Water Treatment Technology Leader

Dr. Astley has 35 plus years of professional experience in the phosphate and water treatment businesses, with progressive responsibility in managerial positions in Technical Services and Research and Development roles. For the past five (5) years he led the team at IMC to develop a pretreatment technology that allows pond water to be purified using RO. In 1996, he was instrumental in the justification and inception of the new Technology Development Group, and he has sole responsibility for an annual budget of about \$4 million of which 50 percent is spent externally on University research, consultants, contractors, and upon technical demonstrations. He is responsible for research and development related to all aspects of the mining of phosphate rock, the manufacture of phosphate fertilizers and the development of new products and processes. His staff includes 10 professional and four (4) permanent and

Dr. Vaughn V Astley Project Relevance

Responsible for research and development related to all aspects of the mining of phosphate rock, the manufacture of phosphate fertilizers and the development of new products and processes.



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five (5) temporary technicians. In addition, he has successfully developed several novel processes in many areas of operations, and has challenged many paradigms related to manufacturing methodologies and environmental treatment regimens.

Dr. Van Nortwick Jr., Ph.D., P.E., IMC, Water Treatment Regulatory Specialist

Dr. Van Nortwick has more than 20 years of environmental engineering and environmental program management experience, primarily with IMC Global Inc., a leading international producer and supplier of agricultural products (phosphates and potash), chemicals, and salt; the U.S. Environmental Protection Agency, and the U.S. Army Corps of Engineers. Dr. Van Nortwick is a skilled environmental planner, regulatory analyst, and environmental policy developer with experience at forecasting trends for industry and government agencies. He is also an experienced negotiator, often acting as liaison between his company and regulatory authorities, legal agents, and the public.

Dr. Van Nortwick manages environmental liabilities based on regulatory requirements and trends, environmental risks at the facilities, perceived corporate risks (e.g., public relations issues, share holder concerns, and political ramifications), economic indicators, financial and legal consequences, and corporate commitment.

Dr. Van Nortwick

Project Relevance

Manages environmental liabilities based on regulatory requirements and trends, environmental risks at the facility, perceived corporate risks (e.g., public relations issues, share holder concerns, and political ramifications), economic indicators, financial and legal consequences, and corporate commitment.

Kenneth Jardine, IMC, Senior Water Treatment Process Engineer

Mr. Jardine has over 25 years of experience in the Florida phosphate industry centered mainly in the process development area. He has worked in a number of diverse areas including uranium recovery from phosphoric acid, breakthrough technology for fertilizer grade DAP production and HF grade calcium fluoride production from phosphate rock. In several cases he has worked on these projects from early research through full scale production. For the past five (5) years he has worked as part of a team at IMC to develop a pretreatment technology that allows pond water to be purified using reverse osmosis (RO).

This effort resulted in the granting of two (2) U.S. Patents. The technology was successfully demonstrated, on a plant scale at the Piney point Phosphate Plant with the production of over 45 million gallons (mg) of excellent quality RO permeate.

Kenneth Jardine

Project Relevance

Developed, with others, a pretreatment technology that allows pond water to be purified using RO.

Technology was successfully demonstrated at the Piney point Phosphate Plant.



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Jerry Lister, IMC, Supervisor of Water Treatment

Mr. Lister is the Production Supervisor for IMC Phosphates, with over 23 years of experience in plant operations. His diversified experience includes production, project management, planning turnarounds and working with outside contractors. Mr. Lister also has experience with double lime treatment of pond water, which he will perform on this project.

Dennis Michalski, IMC, Senior Water Treatment Process Engineer

Mr. Michalski has worked almost exclusively for the last 3 years on the pre-treatment of phosphate plant pond waters. The pre-treatments are necessary to use RO for treatment. Most recently Mr. Michalski was on a team that discharged 46-mg of permeate made from Piney Point pond water. From 1994 until 1999, Mr. Michalski was the Engineering Manager for Mulberry Phosphates. In this capacity, he designed the system which treated phosphate cooling pond water and released 18-mg of RO permeate.

William N. Futch, IMC, Operations Manager

Mr. Futch was responsible for the construction and operation of a pilot, 600K gallon per day demonstration RO plant, treating pond water at Piney Point. This demo plant proved IMC's patented technology for pretreating phos acid cooling pond water to allow RO processing without scaling the membranes. As the Area Production Manager for IMC he managed granular fertilizer plants, \$10 MM conversion of a GTSP plant to GMAP, managed Phos Acid Plants, and implemented Advanced Process Controls, improved recoveries and set production records, managed Uranium recovery plants (including two primary extraction plants at CF Industries) which included the mothballing and eventual demolition of these plants, and performed due diligence of Agrico uranium extraction plants prior to 1993 merger.

Jerry Lister

Project Relevance

Mr. Lister's responsibilities have included overseeing the operation of a Gyp Stack, Phos Acid, Evaporator, and Ball Mill.

Supervised 6 Supervisors and 34 Operators. Established annual budgets and production goals. Reviewed cost and production goal status on a monthly basis taking appropriate action.

Dennis Michalski

Project Relevance

Engineering Manager for Mulberry Phosphates from 1994-99. He has worked almost exclusively for the last three (3) years on the pre-treatment of many phosphate plant pond waters. Most recently Mr. Michalski was on a team that discharged 46-mg of permeate made from Piney Point pond water.

William N. Futch

Project Relevance

Demo plant proved IMC's patented technology for pretreating phos acid cooling pond water to allow RO processing without scaling the membranes.



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Johnny M. Prewitt, IMC, Gypsum Stacks Operations Manager

Mr. Prewitt has over 32 years of professional experience with progressive responsibility in technical and managerial positions. His experience has included operations management, process and project engineering, technical management, environmental permitting and environmental monitoring management. He is responsible for permitting, design, construction, closure and all aspects of regulatory compliance for the company's gypsum stacks in Florida and Louisiana. His experience will be key for the CDM team in the closure of the Piney Point stack.

John O'Connor, PENN PRO, Process Project Engineering Manager

Mr. O'Connor has over 40 years of experience in multi-disciplined project engineering and management. Other activities include FIPR Chemical Process TAC, Supervisor-Manatee River Soil and Water Conservation District (Elected), Founder/President Florida West Coast Resource Conservation and Development Council, and Founder/Former President-Palmetto FFA Alumni Chapter. His relevant experience includes: Project Manager for PENN PRO - Designed and installed portions of gypsum stack closure including HDPE pipelines, energy dissipater structure, several pumping systems and bridges. He is currently managing dredge to remove gypsum from process water cooling pond. Mr. O'Connor will be developing long-term water management strategies for the reuse of water from the Piney Point plant.

Vince Margiotti, PENN PRO, Process Chemical Engineer

Mr. Margiotti has over 30 years of diverse technical and managerial experience. He is a member of the Instrument Society of America, and presented several papers at American Institute of Chemical Engineers' meetings. His representative assignments include: Process Design of Double Liming Station to treat 1,000 gpm of Fertilizer Plant Acidic Waste Water; design of double lime treatment system to treat 1,500 gpm at existing plant, the complete study of existing 2,500 gpm Acidic Water Treatment System to improve throughput, minimize waste removal labor, and determine possible methods of increasing capacity and the process design of multiple gypsum pumping systems and other slurry pumping systems for minerals and organics.

**Johnny M. Prewitt
Project Relevance**

Manager-Gypsum Stacks responsible for permitting, design, construction, closure and all aspects of regulatory compliance for company's gypsum stacks in Florida and Louisiana.

Successfully concluded permitting process for closure of gypsum stack which experienced sinkhole in 1994.

**John O'Connor
Project Relevance**

Project Manager for PENN PRO - Designed and installed portions of gypsum stack closure including HDPE pipe lines, energy dissipater structure, several pumping systems and bridges.

Mr. O'Connor will be developing long-term water management strategies for the reuse of water from the Piney Point plant.

**Vince Margiotti
Project Relevance**

His representative assignments include: Process Design of Double Liming Station to treat 1,000 gpm of Fertilizer Plant Acidic Waste Water; design of double lime treatment system to treat 1,500 gpm at existing plant.



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Jim Pardee, PENN PRO, Process Senior Project Manager

Mr. Pardee has over forty years of experience in project engineering, management, construction and client liaison. Representative project assignments include: Piney Point RO Plant - supervised study of preliminary design of the RO plant located at Piney Point, Florida which included process and mechanical design to utilize existing equipment, and selection of new equipment and the determination of required existing equipment modification, and selection of complementary new equipment to yield logical cohesive design within the projects cost and schedule restraints. He also was responsible for the Piney Point to Port Manatee Treated Water Pipe Line - Engineered, selected (specified, obtained quotations, and initiated purchase of) major equipment.

Jim Pardee

Project Relevance

Piney Point Reverse Osmoses Plant - supervised study of preliminary design of the RO plant located at Piney Point, Florida.

Responsible for the Piney Point to Port Manatee Treated Water Pipe Line

Richard Hardy, PENN PRO, Mechanical Engineer

Mr. Hardy has eight (8) years experience planning and implementing various projects throughout the industry. His representative project assignments include: Mulberry Phosphates Engineering and Technical Services, Mulberry, Florida. For this project he designed 18,000-foot HDPE pipeline for phosphate plant process water and the rainwater runoff pump system.

Richard Hardy

Project Relevance

Designed 18,000-foot HDPE pipeline for pumped phosphate plant process water.

Designed rainwater runoff pump system.

Bob Herz, PENN PRO, Process Project Manager

Mr. Herz has 26 years of experience in project engineering, project management and construction management on projects in seven (7) industries and several government agencies. His experience includes project development from original concept to plant startup, engineering through startup for conversion of safety wash stations to potable water for the entire chemical complex for CF Industries, Plant City, Florida; and engineering, design, procurement, construction and startup service of a granular monoammoniumphosphate (MAP) plant.

Bob Herz

Project Relevance

Engineering, design, procurement, construction and startup service of a granular monoammoniumphosphate (MAP) fertilizer plant.

Richard Chruszez, PENN PRO, Senior Electrical Engineer

Mr. Chruszcz has 35 years of electrical engineering experience in heavy industrial, electric utilities and commercial electrical engineering design. He is licensed as a PE in seven (7) states including Florida and registered with the NCEES as a Professional Engineer (PE). For PENN PRO Engineering in Mulberry, Florida he is the Chief Electrical Engineer, responsible for detailed electrical design for phosphate mining and processing, petro-chem, and aggregate mines.

Richard Chruszez

Project Relevance

Chief Electrical Engineer and department head and professional engineer services for large industrial clients such as IMC, Agrico, Cargill, and US Agri-Chemicals



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Steve Moody, PENN PRO, Structural Engineering Manager
Mr. Moody has over 24 years of experience in Structural Engineering and design of facilities for chemical, mineral, citrus and mining industries. His experience includes project management and construction experience. He was the structural engineer responsible for gypsum stack closure bridges and pump structures for fresh water and process water transfer and the structural engineer responsible for design of the granulated monoammonium phosphate plant for IMC Phosphate, New Wales, Florida.

Steve Moody

Project Relevance

Structural engineer responsible for gypsum stack closure bridges and pump structures for fresh water and process water transfer.

Liner Assigned Staff

The CDM Team has enlisted the services of Comanco (CEC) to provide subcontractor services for the Liner component of the ITN. CEC is currently installing all liners at the Piney Point facility. We have provided below, and in the following resumes, the personnel information for the staff members of Comanco that will be responsible for providing these services.

Tommy Topp, CEC, Liner Sr. Project Manager

Mr. Tommy Topp has more than 14 years of experience installing HDPE smooth and texture liners. Mr. Topp has executive level responsibilities and direction for the Civil Group of CEC. His experience includes bidding, negotiating, constructing, management and close out of all projects related to Phosphogypsum stacks for CEC. As one of the first employees of CEC in 1989, Mr. Topp represents this company at the highest level of expertise. He has managed and supervised projects involving more than 27 million square feet of HDPE liner. His role as Group VP has most recently involved him in the management responsibilities for the Piney Point NGS North Stack Closure consisting of 35 acres of 80 mil HDPE Liner.

Tommy Topp

Project Relevance

More than 14 years of experience installing HDPE smooth and texture liners.

Has managed and supervised projects involving more than 27 million square feet of HDPE liner.

Management responsibilities for the Piney Point NGS North Stack Closure consisting of 35 acres of 80 mil HDPE Liner.

Joe Benz, CEC, Liner Project Manager

Mr. Joe Benz has four (4) years of experience installing HDPE smooth and texture liners. Mr. Benz has recently managed a project similar to the Piney Point Project that involved installing liners on a phosphogypsum stack system. Mr. Benz is directly involved in all phases of project work including supervision, safety, subcontractor relations, customer relations, administration and completion. Mr. Benz has supervised projects involving more than 23 million square feet of HDPE liner. His role as Project

Joe Benz

Project Relevance

Has supervised projects involving more than 23 million square feet of HDPE liner.

Most recently involved in the management responsibilities at the IMC Phase II Expansion project which consisted of 320 acres of 60 mil HDPE Liner.



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Manager has most recently involved him in the management responsibilities at the IMC Phase II Expansion project which consisted of 320 acres of 60 mil HDPE Liner.

Dragan Milosavljevic, CEC, Liner Project Superintendent

Mr. Dragan Milosavljevic has more than 10 years of experience installing HDPE smooth and texture liners. Mr. Milosavljevic has recently managed a project similar to the Piney Point Project that involved installing liners on a phosphogypsum stack system. His 10 plus years of experience includes working on and supervising a variety of phosphate construction projects including closures, liner installation, drain installation and excavation. Mr. Milosavljevic has supervised projects involving more than 23 million square feet of HDPE liner. His role as General Superintendent has most recently involved him in the supervisory responsibilities at the IMC Phase II Expansion project which consisted of 320 acres of 60 mil HDPE Liner.

**Dragan Milosavljevic
Project Relevance**

Ten years experience includes working on and supervising a variety of phosphate construction projects including closures, liner installation, drain installation and excavation.

He has supervised projects involving more than 23 million square feet of HDPE liner.

Todd Kirkman, CEC, Field Supervisor

Mr. Kirkland has more than 12 years of experience with the installation and fusion welding of HDPE pipe and installation of dewatering drains. Mr. Kirkman has been an employee of CEC for 11 years during which his roles from Technician to Superintendent have always involved HDPE Pipe and various dewatering applications. Mr. Kirkman was the Project Superintendent for the Pipe and Drain portion of a Farmland Hydro, L.P. project in 2000/2001. Pipe installation included various sizes from 6" to 24" totaling 12.3 miles of HDPE drain piping installed for a gypsum stack expansion project.

**Todd Kirkman
Project Relevance**

Twelve years of experience with the installation and fusion welding of HDPE pipe and installation of dewatering drains

Stuart Taylor, CEC, Liner Field Supervisor

Mr. Stuart Taylor has more than five (5) years of experience installing HDPE smooth and texture liners. Mr. Taylor has recently worked as Field Supervisor on numerous projects that involve the installation of liners on a phosphogypsum stack system. Mr. Taylor has supervised projects involving more than 11 million square feet of HDPE liner. His role as Field Supervisor has most recently involved him in a superintendent role at the Piney Point NGS and OGS Closure projects which consisted of 70 Acres of 80 mil Liner.

**Stuart Taylor
Project Relevance**

Superintendent role at the Piney Point NGS and OGS Closure projects which consisted of 70 Acres of 80 mil Liner.



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Earthwork, HDPE Pipe and Drain, Grassing Assigned Staff

The CDM Team has enlisted the services of Moretrench Environmental Services, Inc. (MES) to provide subcontractor services for the following three (3) components of the ITN; Earthwork, HDPE Pipe and Drain Work and Grassing. We have provided below, and in the following resumes, the personnel information for the three (3) staff members of MES that will be responsible for providing these services.

Al Schuman, MES, Senior Project Manager

Mr. Schuman is responsible for executive-level responsibilities and direction of civil construction, industrial infrastructure, groundwater control and treatment, and geotechnical projects for MES. His experience includes the bidding, negotiating, construction, management and close-out of a wide variety of civil and industrial projects for a diverse group of owners including phosphate, utility, food processing, and various manufacturing companies. His specific project work has included phosphogypsum stack closures, piping and drain systems, relief well systems, construction dewatering, plant maintenance service and repair, wastewater treatment plants, slurry walls, drydocks, subways and tunnels, landfill gas and leachate collection systems, groundwater treatment and remediation systems, hydraulic barriers, pipe-fusing and slip-lining, drilling, grouting, and ground freezing for the purpose of groundwater control.

Al Schuman

Project Relevance

His specific project work has included phosphogypsum stack closures, piping and drain systems, relief well systems, construction dewatering, plant maintenance service and repair, and wastewater treatment plants.

Michael Panny, MES, Project Manager

Mr. Panny is Project Manager /Superintendent for MES. He supervises project activities on several sites concurrently. In his role as project manager/superintendent he is directly involved in all phases of project work on job sites including site supervision, safety, budget control, coordination with vendors, subcontractor relations, client relations, project estimates, project administration, and timely completion of each project. During his 19 years with MES, Mr. Panny has acted as field lead for a variety of construction projects including phosphogypsum stack closures, toe drain installations, relief well systems, grouting, boil remediation, gypsum stack maintenance, geotechnical drilling, plant service and maintenance work, and groundwater control. Mr. Panny will be responsible for overseeing the site grading; dike construction; compaction; reinforced concrete drainage structure construction; installation of relief drains with collector pipes, filter gravel and filter fabric; fine grading and maintenance of surfaces to receive a geomembrane liner.

Michael Panny

Project Relevance

During his 19 years with Moretrench, Mr. Panny has acted as field lead for a variety of construction projects including phosphogypsum stack closures, toe drain installations, relief well systems, grouting, boil remediation, gypsum stack maintenance, geotechnical drilling, plant service and maintenance work, and groundwater control.



IMC



MORETRENCH



Paul Davis, MES, Superintendent

Mr. Davis is a Superintendent for MES. He has worked as a MES superintendent for over one (1) year, and previously worked as superintendent for McDonald Company for the last five (5) years of his nine (9) years of employment. Mr. Davis has over 10 years of experience working on and supervising a variety phosphate construction projects including excavation and grading work, stack closures, drain installations, liner installations, liming operations, and gypsum stack maintenance. Mr. Davis will assist Mr. Panny in overseeing the site grading; dike construction; compaction; reinforced concrete drainage structure construction; installation of relief drains with collector pipes, filter gravel and filter fabric; fine grading and maintenance of surfaces to receive a geomembrane liner.

Paul Davis

Project Relevance

Has over 10 years of experience working on and supervising a variety phosphate construction projects including excavation and grading work, stack closures, drain installations, liner installations, liming operations, and gypsum stack maintenance.



IMC



MORETRENCH



Resumes

CDM

Richard A. Slovarp, CDM, Officer-in-Charge
John Brafford, CDM, Team Leader
Dean Carter, P.E., CDM, Project Manager
Richard D. Moore, P.E., DEE, CDM, Technical Review Committee
Stephen M. Robinson, CDM Health and Safety Director
Donald M. Thompson, Ph.D., P.E., CDM, Technical Review Committee
Lee P. Wiseman, P.E., DEE, CDM, Technical Review Committee
Paul Roberts, CDM, Facilities Project Manager
Michael A. Cruz, CDM, Assistant Project Manager
Wayne Winner, CDM, Project Superintendent
Jason Mills P.G. CDM Project Geologist

QuietEarth, Consultant

Craig A. Kovach, P.G.,

IMC

Dr. Vaughn V. Astley, IMC, Water Treatment Technology Leader
Dr. Van Nortwick Jr., Ph.D., P.E., IMC, Water Treatment Regulatory Specialist
Kenneth Jardine, IMC, Senior Water Treatment Process Engineer
Jerry Lister, IMC, Supervisor of Water Treatment
Dennis Michalski, IMC, Senior Water Treatment Process Engineer
William N. Futch, IMC, Operations Manager
Johnny M. Prewitt, IMC, Gypsum Stacks Operations Manager

PENN PRO

John O'Connor, PENN PRO, Process Project Engineering Manager
Bob Herz, PENN PRO, Process Project Manager
Jim Pardee, PENN PRO, Process Senior Project Manager
Richard Hardy, PENN PRO, Mechanical Engineer
Richard Chruszez, PENN PRO, Senior Electrical Engineer
Steve Moody, PENN PRO, Structural Engineering Manager
Vince Margiotti, PENN PRO, Process Chemical Engineer

COMANCO

Tommy Topp, CEC, Liner Sr. Project Manager
Joe Benz, CEC, Liner Project Manager
Dragan Milosavljevic, CEC, Liner Project Superintendent
Todd Kirkman, CEC, Field Supervisor
Stuart Taylor, CEC, Liner Field Supervisor

Moretrench

Al Schuman, MES, Senior Project Manager
Michael Panny, MES, Project Manager
Paul Davis, MES, Superintendent



MORETRENCH



Richard A. Slovarp

Vice President, Southeast Regional Manager

Education

Coursework at Montana State University, Billings, Montana

10 hour OSHA Certified First Aid CPR

Mr. Slovarp is the manager of CDM construction and design/build project operations in the Southeast. He oversees all construction and design/build projects and pursuits in the region, and manages CDM's staff of estimators, schedulers, project managers, construction managers, and superintendents. He brings more than 30 years of experience to the CDM team, including expertise in both the design/build and traditional project delivery approaches.

Mr. Slovarp's responsibilities have included project management, estimating, procurement, design/drafting oversight, subcontractor coordination, quality control, and business development. He has completed projects including water and wastewater treatment plants, refineries, power plants, pipelines, and industrial buildings. His experience includes managing the Southern office of a major general contractor.

Project Manager, South Water Reclamation Facility Phase IVA and IVB Improvements, Orange County, Florida. For Orange County Utilities, Mr. Slovarp is managing the completion of Phase IV improvements and expansion at the South Water Reclamation Facility using a

design/construction management-at-risk approach. Working in a joint venture with Sverdrup Civil, Inc., CDM is expanding the existing wastewater treatment plant to a capacity of 43 million gallons per day (mgd).

Experience Highlights

- Manager, Design/Build Operations in Southeast
- Project Manager, South Water Reclamation Facility Phase IVA and IVB Improvements
- Over 30 years of experience in construction industry

Phase IVA was completed on a budget of \$17.8 million and consisted of upgrading portions of the plant to provide additional liquid treatment capacity. This phase included modification of an existing aeration basin; addition of two new 165-foot diameter secondary clarifiers; addition of a new return activated sludge/waste activated sludge (RAS/WAS) pumping station; modifications to headworks, yard piping, and air piping; and construction of a new electrical building.

Mr. Slovarp is currently managing Phase IVB, which will complete the plant expansion to 43 mgd, including upgrading the existing influent pumping, preliminary treatment, North Plant liquid treatment facilities, solids handling, and odor control facilities. This phase, with an estimated budget of \$38.7 million, also includes installing the hardware required to implement the facility-wide automation program.

Project Executive, Design/Build and Construction Projects, Florida. As project executive for several design/build and construction projects in Florida, Mr. Slovarp has participated in constructibility reviews, value engineering reviews and provided technical, schedule, and budget oversight as appropriate for the projects. These projects have included the \$3.2 million

design/build of effluent pump station improvements for Orange County; the construction of wastewater pipeline and pumping facilities at the Kennedy Space Center; and the \$5.6 million design/build of county-wide supervisory control and data acquisition (SCADA) facilities for Orange County, the City of South Bay WTP improvements, over \$5 million in remediation work for a private client, the addition of \$3 million Biofilter for the Solid Waste Authority of Palm Beach County, Design Build work for National Parks Services associated with the Everglades.

Project Manager, Anaerobic Digester Facilities Construction, Durham, North Carolina. Mr. Slovarp managed the \$13 million construction of anaerobic digester facilities for the City of Durham. The project included the construction of four new digesters with support facilities, rehabilitation of six existing digesters, yard piping, extensive sitework, and plant operations interface to coordinate shutdowns and tie-ins.

His industrial facility experience includes managing the construction of refinery turnaround work at the Exxon and Continental Oil Refinery in Billings, Montana. In addition, Mr. Slovarp has managed projects including the following:

- Philadelphia Steam Pilot Plant, Philadelphia, Pennsylvania. Mr. Slovarp was responsible for the estimate proposal and project kick-off for this \$400,000 design/build project.
- Ocean County Utilities Authority Sludge Dryer Facility, Toms River, New Jersey. As project manager, Mr. Slovarp oversaw estimating, building/design, startup, and completion of this \$9 million D/B project.
- Upper Blackstone Wastewater Treatment Plant, Worcester, Massachusetts. For this \$13 million D/B project, Mr. Slovarp managed the joint venture team proposal, estimate, negotiations, and project kickoff.
- Tri-County Water Treatment Plant, Cinnaminson, New Jersey. For the New Jersey-American Water Company, Mr. Slovarp provided mechanical construction consulting during the final design of the Tri-County Water Treatment Plant.
- Massachusetts Water Resources Authority (MWRA) Boston Harbor cleanup projects. The projects included the \$59 million construction of the North Main pump station; \$111 million Secondary Reaction and Batteries A and B project; \$54 million construction of a 7-megaWatt cogeneration plant; and \$141 million construction of secondary treatment facilities for Secondary Clarification Batteries A and B.

Professional Activities

Member, American Water Works Association

Member, Water Environment Federation

John Brafford

Team Leader

Mr. Brafford is one of North America's leading authorities on the operation, maintenance and inspection of chemical complexes and phosphate mines.

Education

Mr. Brafford graduated from Virginia Polytechnic Institute, Blacksburg, Virginia, in 1958 with a Bachelor of Science degree in Chemical Engineering.

General Phosphate Industry Experience

Mr. Brafford's employment in the phosphate industry has consisted of 25 years of service with IMC (name evolved from International Minerals & Chemical Corp. through IMC Fertilizers, Inc., to IMC-Agrico Co.), a 5 year loan to Coromandel Fertilizers, Ltd., and 7 years of employment with CF Industries, Inc.

During his time with IMC and CF Industries, Mr. Brafford was stationed in Central Florida. His experience with Coromandel Fertilizers was in New York, NY, and Visakhapatnam, AP, India.

Initial employment with IMC in 1964 as a Shift Foreman in charge of 2 DAP Plants, a GTSP Plant, and 2 Sulfuric Acid Plants. Mr. Brafford retired in 1996 from the position of Vice President -Phosphate Operations. In this capacity he was responsible for the operation of 6 Chemical Complexes and 8 Phosphate Mines. During the intervening years, he worked as a Project Engineer, Production Superintendent, Senior Process Engineer, Development Engineer, Chief Process Engineer, Production Manager, Operations Manager, and Vice President & General Manager. During these years he was involved in numerous de-bottlenecking and upgrading projects, several major plant expansions, and one grass roots plant construction, as well as general management duties.

Mr. Brafford was selected as ENGINEER OF THE YEAR in 1991 by the local chapter of the American Institute of Chemical Engineers professional society. Upon his retirement in 1996, he was honored by IMC-Agrico Co. with the naming of the New Wales Plant's engineering building as "THE BRAFFORD ENGINEERING BUILDING". He was also honored by the Florida Audubon Society and presented with a bronze eagle statue engraved "FOR YOUR LIFELONG LEADERSHIP IN PROMOTING CONSERVATION IN FLORIDA".

Specific Gypsum Storage and Handling Experience

In many of the production and engineering positions he held throughout his career, Mr. Brafford was responsible for the operation or monitoring of the gypsum storage areas of the plants.

With the expansion of the gypsum storage area at the IMC New Wales plant, he was involved in the design, permitting, and construction of the state-of-the-art, first ever HDPE-lined gypsum stack. This involved attending numerous coordination meetings with the IMC engineering staff, the

Honors/Awards

ENGINEER OF THE YEAR in
1991 by the local chapter of the
American Institute of Chemical
Engineers

designers, Ardaman & Assocs., and construction contractors, and making numerous informational presentations. The latter to regulators, including Polk County Commissioners, Central Florida Regional Planning Council members, Florida Dept. of Environmental Protection employees, news media editorial boards, such as those of The Lakeland Ledger and The St. Petersburg Times, environmentalist on the IMC Environmental Advisory Board, such as the Audubon Society and the Sierra Club, company representatives on the Florida Phosphate Council, and IMC employee groups. Also was an Expert Witness in several permitting hearings, an intervention suit brought by the environmental watchdog group Manasota-88, and an Arbitration Hearing for lack of performance by a slurry wall contractor.

With the development of a sinkhole under the active gypsum stack at the New Wales Plant, was involved in development of a remediation plan with Ardaman & Assocs., and their sub-contractors. He also acted as the IMC contact person with all interested parties and the news media, including newspapers and television.

Dean E. Carter, P.E.

Senior Project Manager

Education

B.S. – Civil Engineering,
University of Maine (1984)

Registration

Professional Engineer: Maine
(1990)

Training

OSHA 40-hour Site Safety
Training

OSHA 8-hour Annual Refresher
Training

OSHA Construction Standard
for Lead Training, 29 CFR
1926.62

Mr. Carter has 27 years of construction and engineering experience on a variety of project types ranging from building construction and renovation projects to heavy construction and environmental remediation projects. He is experienced in all phases of project management, from bid preparation to project execution to final closeout. He has managed projects under various contract types, including design/build, lump sum, cost plus, and time and materials contracts. Mr. Carter's responsibilities have included estimating, procurement, subcontractor management, quality control, budget and schedule management, onsite construction supervision, design, and health and safety management. He is particularly well versed in environmental and construction regulations in Florida and the Southeast.

Project Manager, Site Remediation Lantana Landfill, Lake Worth, Florida.

Mr. Carter is managing the site development efforts for the Solid Waste Authority of Palm Beach County. This project consists of converting a former landfill to a golf course facility. Work includes the placement and grading of over 500,000 linear yards of fill materials, installation of a stormwater management system, installation of irrigation supply wells, and installation of an irrigation water distribution system.

Project Manager, Site Remediation, Orlando, Florida. Currently, Mr. Carter is the program manager for a confidential client in Orlando, Florida. In this role, he is responsible for providing a turn-key approach to project execution, from pre-construction activities (including project scope development, permit coordination, engineering/design, cost estimating, value engineering,

constructibility) to execution and closeout of the project (including staffing, project and construction management, scheduling, client relations and coordination, timely and cost effective completion of work activities). Projects at this site include the design/build of stormwater conveyance/piping systems, large holding ponds, diversion channels, site restoration and backfilling, landfill excavation, materials handling, and soil and groundwater treatment and disposal.

Project Manager, Interim Remedial Action, Auburndale, Florida.

Mr. Carter managed the execution of a source removal project for a private client in Auburndale, Florida. The project consisted of excavating and offsite disposal of approximately 9,000 tons of petroleum-contaminated soil from the site. The project also included injection of an oxygen-reducing compound into the groundwater to provide in situ treatment of the ground water and a barrier to offsite migration of the contaminated groundwater.

Project Manager, Butler Oaks Dairy Stormwater Treatment. Mr. Carter managed the design and construction of a dairy stormwater treatment

Experience Highlights

- Over 27 years of construction and engineering experience.
- Project Manager, Site Remediation, Lantana Landfill in Lake Worth which includes converting a landfill facility into a golf course.
- Project Manager, Interim Remedial Action project which included excavating petroleum-contaminated soil.

system designed to reduce phosphorus discharge from the dairy. The system consisted of stormwater collection swales, chemical injection system and pumps, settling pond, and a sludge drying bed.

Project Manager, Wingate Road Landfill Design/Build Closure, Fort Lauderdale, Florida. Mr. Carter managed the design and construction of the closure of the Wingate Road Municipal Incinerator and Landfill Superfund Site. The project was executed as a design/build project with three phases to expedite the closure schedule. Phase One consisted of debris removal and clearing work. Phase Two consisted of demolition of the existing incinerators and other structures at the site. Phase Three consisted of the installation of the 37-acre geomembrane cover system in the landfill area, overall site grading, and stormwater system installation for the site.

Project Manager, North Central Landfill, Exposed Geomembrane Cover, Polk County, Florida. Mr. Carter managed the installation of a 15-acre temporary exposed geomembrane cover system at the North Central Landfill in Polk County. The cover system consists of a 60-mil textured geomembrane installed on a 3-to-1 slope. The project also included constructing a paved access road to the top of the landfill and installing catch basins and stormwater piping on the north and west slopes of the landfill.

Program Manager, Florida Department of Transportation (FDOT) District 4, Fort Lauderdale, Florida. Mr. Carter managed the FDOT District 4 environmental services contract. The projects performed consisted of environmental services in support of right-of-way acquisition for roadway expansion projects. Services provided to FDOT included Phase I and Phase II assessments, coordination of environmental requirements with roadway designers, asbestos removal, and underground storage tank (UST) removals.

Project Manager, Concourse C Remedial System Installation, Miami International Airport, Miami, Florida. Mr. Carter managed the installation of a \$7 million groundwater treatment system consisting of two 500-gallon per minute (gpm) air stripping tower systems and eight groundwater recovery wells, soil vapor extraction wells, and a 1,400-linear foot recharge gallery. The system is located airside and required strict scheduling and coordination with airside operations to complete. Also at Concourse C, Mr. Carter managed a \$3.5 million project for a groundwater and soil vapor extraction piping system. Work was performed in conjunction with the construction of a new baggage handling facility.

Project Manager, Northwest Cargo Area Groundwater Remediation, Miami International Airport, Miami, Florida. Mr. Carter also managed a \$4.5 million groundwater remediation project consisting of constructing five treatment systems at the Northwest Cargo Area of Miami International Airport. Other projects he managed at Miami International Airport include tank removal and installation projects, environmental Phase I and II assessments, emergency response, and pilot study projects for Dade County.

Richard D. Moore, P.E., DEE

Vice President

Education

M.S. – Civil/Environmental
Engineering, University of
Massachusetts at Lowell (1977)

B.S. – Civil Engineering,
Michigan State University
(1970)

Mr. Moore specializes in engineering and project management services related to drinking water and wastewater treatment and has over 30 years of experience in the planning, design, and construction of major water and wastewater facilities in the United States and overseas. Mr. Moore's project involvement includes managing major public utility projects in the areas of water supply, treatment, and distribution; wastewater collection, treatment, and disposal; and stormwater management.

Division Quality Manager-Florida Area. Mr. Moore is responsible for developing and overseeing the division's Quality Implementation Plan, including training of staff, monitoring compliance with QM procedures, and performing and overseeing independent QM audits and technical reviews for CDM's 10 Florida offices.

Registration

Professional Engineer:
California (1974),
Massachusetts, and Florida

Project Manager, a 66-mgd Surface Water Treatment Plant

Design/Build/Operate project for Tampa Bay Water. The D/B/O team included U.S. Filter Operating Systems and Clark Construction Group. The treatment process includes high rate ballasted flocculation sedimentation deep bed granular activated carbon (GAC) filters, and ozone disinfection. Mr. Moore was also project director for Tampa Bay Water's surface water supply project, which included design, permitting, land acquisition, and construction services for two intake pump stations, a repump station, and 17 miles of 84-inch and 72-inch pipelines for Tampa Bay Water.

Experience Highlights

- Quality Manager for Florida
- Over 30 years of experience in engineering industry
- Project Manager for Tampa Bay Water's 66-mgd Surface Water Treatment Design/Build/Operate project

Project Manager, Manatee County Water Treatment Plant (WTP) Expansion and Wellfield and Water System

Improvements, City of Venice, Florida. The Manatee County project included the Lake Manatee Watershed water resources development report, a 30-mgd WTP expansion involving a dual-purpose process train for lime softening groundwater or coagulation/sedimentation/filtration for surface water. The project also included developing a new 15-mgd wellfield for alternate water supply. The Venice project included a water master plan and new facilities consisting of a new wellfield, a 4-mgd reverse osmosis (RO) WTP, and expansion of the water distribution system including high service pumping and storage.

Additional water experience includes a water master plan update, peer review/value engineering, and construction management for the Collier County North Regional WTP 8-mgd expansion, and design of a surface WTP for the Republic of Singapore. Other water projects include a ferric chloride coagulation study for Anchorage, Alaska, and a new clearwell and chemical building for the City of Tampa, Florida. Mr. Moore has served on technical advisory committees on membrane treatment technology concentrate discharge permitting and updates to Florida's Drinking Water Construction

Permit regulations for the Florida Department of Environmental Protection (FDEP).

Project Director, City of Venice's 3-mgd Advanced Wastewater Treatment (AWT) Plant, Venice, Florida. The AWT plant project utilizes the modified Bardenpho™ process for biological nutrient removal, and the 1.5-mgd AWT Bee Ridge water reclamation facility (WRF) for Sarasota County. Additional project director experience includes the Charlotte County East Port WRF expansion from 3 to 10 mgd.

Honors/Awards

Diplomate, American Academy of
Environmental Engineers

Chi Epsilon

Senior Design Engineer and Project Manager, Manatee County Wastewater Treatment Plants (WWTPs), Manatee County, Florida. The three wastewater treatment plants included the southwest plant expansion from 12 to 18 mgd, and two new regional plants for the north and southeast service areas with a capacity of 5.4 mgd each. The north and southeast plants use a two-stage Modified Ludzack-Ettinger (MLE) process for nitrogen removal. Mr. Moore was technical review coordinator for the Cape Coral collection system, consisting of over 90 lift stations, 200 miles of gravity sewers, and 45 miles of force mains. Recent project involvement includes serving as project director and officer in charge for the Collier County wastewater master plan and 201 facility plan update.

Professional Activities

American Water Works Association

Water Environment Federation

Florida Engineering Society

National Society of Professional Engineers

Member and Water Subcommittee Chairman for the Florida Engineering Society Conservation and Environmental Quality Committee

Stephen M. Robinson

Health and Safety Director

Certification

Certified Safety Technician
Certified OSHA Instructor (10
and 30 hours)
Certified Construction Safety
Specialist
Certified Occupational Health
and Safety Technician

Mr. Robinson has 31 years of experience coordinating and directing health and safety programs and personnel. His expertise includes writing and implementing corporate health and safety programs, performing site and facility audits, enforcing subcontractor and intra-company compliance with applicable state and federal regulations, and conducting employee health and safety training. Aside from his management duties, Mr. Robinson also has nine years of experience serving as a safety consultant for various private and public projects.

Currently, Mr. Robinson manages all health and safety activities for CDM's general construction and design/build projects throughout the United States. In this role, he oversees the health and safety of construction projects, supervises the writing of health and safety plans, performs required OSHA training for employees and supervisors, and acts as a CDM liaison with OSHA. Mr. Robinson also supports the parent company's efforts in the health and safety realm by performing health and safety field audits at CDM's Eastern United States field sites to ensure compliance with CDM policy and OSHA law.

Experience Highlights

- CDM's Health and Safety Director - provides oversight for health and safety activities and design/build projects throughout the United States.
- Certified OSHA Instructor and Health and Safety Technician
- Over 31 years of experience in directing health and safety programs and personnel

As a certified and experienced safety trainer and supervisor, Mr. Robinson oversees employee development and training on the following topics:

- Lockout/Tagout
- Hazard communication and Confined space entry
- Respiratory protection
- Supervisory health and safety
- New hire health and safety orientation
- 8 hour Hazardous Waste Refresher Training and OSHA 10- and 30-hour safety classes

Mr. Robinson's most recent project experience includes the following:

Health and Safety Oversight, Flamingo Water Treatment Plant Project, Everglades, Florida. Mr. Robinson is providing health and safety oversight for this water treatment plant project for the National Park Service. The first project phase, valued at \$2.4 million, involves the design/build of water system improvements to the Flamingo area of the Everglades National Park, including developing an adequate water source, modifying the existing water treatment facilities, and completely replacing the water distribution

system. CDM is currently in the first option year of the contract, awarded in 2002.

Health and Safety Oversight, Alcoa Central Impoundment, Massena, New York. For The Aluminum Company of America (Alcoa), Mr. Robinson provided health and safety oversight for the remediation of a PCB-contaminated waste treatment lagoon covering 80 acres at their aluminum refining and production facility in Massena, New York. This project involved evaluating various remedial alternatives and draining the impoundment, excavation, treatment, on-site landfill disposal, and capping.

Health and Safety Oversight, Alcoa Slurry Wall Construction, St. Louis, Missouri. Mr. Robinson provided health and safety oversight for this slurry wall construction project for Alcoa in St. Louis, Missouri. The project involved constructing a cement-bentonite slurry wall along the Mississippi River. CDM value engineered the design proposed by another consultant and constructed the containment wall and collection wells behind the slurry wall.

Health and Safety Oversight, Stouffer Chemical Site Remediation, Louisville, Kentucky. Mr. Robinson provided health and safety oversight for a site remediation project at the former Stouffer Chemical site in Louisville, Kentucky. Mr. Robinson provided hazardous waste training for on-site personnel and acted as liaison between CDM and Stouffer Chemical in matters related to safety and health.

Professional Activities

State Safety Consultant, Associated Builder's and Contractors

Past President, Safety Committee, New York State Associated General Contractors

Member, Level 3 United Nations Consultants, World Safety Organization

Member, Associated General Contractors of America

Donald M. Thompson, Ph.D., P.E.

Vice President

Education

Ph.D. - Environmental
Engineering, University of
Central Florida, 1995

M.S. - Environmental
Engineering, University of
Florida, 1981

B.S. - Zoology, University of
Florida, 1976

Registration

Professional Engineer: Florida,
1986

Dr. Thompson is an environmental engineer with 25 years of experience in water and wastewater treatment process and design with an emphasis on membrane technology. His membrane technology experience includes both low pressure (microfiltration and ultrafiltration) and high pressure (nanofiltration and reverse osmosis) membrane technologies. Dr. Thompson's services to both public and private clients for membrane technology includes pilot testing, feasibility analyses, process selection, design, construction management, and alternative project delivery including design/build. Currently Dr. Thompson serves as the Membrane Advocate for CDM with duties relating to marketing, technical oversight, and technology transfer for the various membrane technologies on a firm-wide basis.

Peer Review Panel Member, Columbia Heights and Fridley Membrane Treatment Facilities, Minneapolis Water Works, Minnesota. Dr. Thompson currently serves as a member of the Peer Review Panel for the Minneapolis Water Works' ultrafiltration treatment facilities planned for the Columbia Heights and Fridley water treatment plants. This blue-ribbon panel advises the Minneapolis Water Works and the design team on matters relating to membrane system procurement, process selection, pilot testing, design, and regulatory issues.

Experience Highlights

- Past Chairman, American Water Works Association, Membrane Processes Committee
- Chairman, American Water Works Association, 1999 Membrane Conference Planning Committee
- Diverse experience with all forms of Membrane Technology

Process Designer, 8-mgd Low Pressure Membrane System, Barberton, Ohio. Dr. Thompson is serving as the process Pdesigner for the City of Barberton low pressure membrane system. This project involved new process selection to address future DBP formation regulatory concerns and resulted in the selection of microfiltration (MF)/ultrafiltration (UF) technology. Dr. Thompson provided pilot plant data analysis, produced technical and contractual documents for membrane system procurement including immersed and enclosed (pressure) systems, and provided proposal evaluation to the client. Dr. Thompson will also participate in the facilities design to accommodate the new facilities

Process Designer, 25-mgd and 30-mgd Nanofiltration Facilities, Palm Beach County, Florida. These projects involved replacing an existing lime softening process with membrane softening at the existing WTP #9 and replacing and expanding the nanofiltration (NF) facilities at the existing WTP #3. Dr. Thompson provided alternative analysis for each facility, provided process criteria, assisted in design, and oversaw startup for WTP #9. He performed similar services for WTP #3 with startup scheduled for Spring 2004. Both facilities utilize raw water blending to reduce overall necessary membrane treatment capacity.

Honors/Awards

Water Quality Division Award,
AWWA, 1989

Pilot Studies Director, Miami-Dade Water and Sewer Department Microfiltration and Reverse Osmosis Studies, East Central Regional Wastewater Treatment Facility, City of West Palm Beach, Florida. Dr. Thompson performed the demineralization and removal of nutrients from a tertiary effluent at the advanced water treatment demonstration project treatment facility using MF followed by low pressure reverse osmosis (LPRO) membrane treatment for an indirect potable reuse application. The treated effluent from this facility is discharged to a constructed wetland system and eventually is recovered in the city's potable water wellfield. These studies involved the optimization of phosphorus removal to meet Everglades Restoration water quality limits.

Project Director and Quality Assurance/Quality Control Reviewer, Various Membrane Design Projects. Dr. Thompson led process and design efforts at the City of Plantation West WTP 12-mgd membrane facility. The facility was one of the first membrane softening facilities in the world to go online. The process utilized a unique blend of nanofiltration and brackish water demineralization membranes to achieve iron removal while optimizing softening and operation costs. In Ohio Dr. Thompson has provided technical direction for a 2-mgd LPRO facility for the Village of Minster, one of the first such projects in Ohio. Dr. Thompson has provided technical direction and/or quality assurance/quality control review in developing the design criteria used in the design of the 40-mgd Boca Raton NF facility, the 10.5-mgd Deerfield Beach NF facility, and the 25-mgd South Miami Dade NF facility, all in South Florida. For Tampa Bay Water and Boynton Beach, Florida he has prepared design criteria packages for procurement of LPRO and NF facilities by design/build procurement methods. For Saugeen Shores, Ontario he is providing procurement documents for a 4-mgd MF/UF system.

Lee P. Wiseman, P.E., DEE

Principal

Education

M.S. - Environmental
Engineering, University of
Central Florida, 1985

B.S. - Microbiology, University
of Central Florida, 1982

Registration

Professional Engineer: Florida
(1990)

Mr. Wiseman is qualified in the following engineering areas: hydrogeology, groundwater modeling and monitoring, effluent reuse, contamination assessments and groundwater remediation, stormwater management/modeling, water resources, and environmental permitting. He has 19 years of experience in applying various analytical and numerical models to simulate groundwater flow, mass transport, and water quality.

Since joining CDM, Mr. Wiseman has participated in several large water resources projects involving groundwater and integrated modeling. Mr. Wiseman has developed field testing programs, developed databases, and performed hydraulic analyses for the computer modeling of surface and subsurface water flow patterns for the design of water supply wells, rapid infiltration basin projects, reuse irrigation systems, and groundwater remediation systems.

Project Manager, Universal Sand Lake Road Complex (SLRC) Remediation Project, Orlando, Florida. This project involves source control and groundwater remediation of six known landfills and three areas of concern

within the SLRC. Mr. Wiseman was involved with developing the Interim Measures Work Plan (IMWP) for Landfills 3, 4, and 6 excavations and groundwater remediation. He is the engineer-of-record for the groundwater remediation systems at Landfills 3, 4, 6, and the Pershing Waste Conservation Area, the sitewide water treatment facility and effluent sprayfield. He provided all of the necessary documentation to CDM's construction crews to implement the remediation activities identified in the IMWP.

CDM obtained all of the necessary permits and prepared all of the plans to begin construction activities at Landfill 3 in December 1999 within a one-year period. Construction activities at Landfill 4 started in October 2000 and ended in February 2002.

The source material has been removed from both landfills and the groundwater remediation systems are now operational. Mr. Wiseman has also developed several RCRA Facility Investigation Work Plans for other sites at the SLRC.

Project Director, Pine Hills Landfill HSWA Permitting and Environmental Compliance, Orange County, Florida. Mr. Wiseman has overseen the collection and analysis of 10 years of groundwater quality sampling at this RCRA Landfill site. Mr. Wiseman also helped prepare the renewal of the site permit from a RCRA to a HSWA permit. He was also involved in the preparation of the corrective action feasibility report for the site in accordance with the HSWA Permit.

Experience Highlights

- Managed several large groundwater / integrated modeling projects
- Extensive experience with negotiating Water Use Permits
- Managed large Water supply development projects

Honors/Awards

Diplomate, American Academy of
Environmental Engineering

Project Manager, St. Johns County Utilities Water Supply Development Program, Florida. Mr. Wiseman is presently working as a project manager helping to meet the long-term water supply needs of St. Johns County, Florida. He was involved with the alternative water supply study that recommended pumping from the Floridan aquifer and treating the water with a low-pressure reverse osmosis process. Mr. Wiseman is currently managing the consumptive use permitting and aquifer testing programs in support of the Floridan aquifer wellfield design at the Mainland and Northwest WTPs. Mr. Wiseman is the engineer-of-record for the expansion of the Tillman Ridge and Northwest Floridan aquifer wellfields.

Project Engineer, Assessment of Aquifer Storage and Recovery, City of Sanford, Florida. This project consisted of performing a desktop assessment of the feasibility of implementing ASR in Sanford, FL. This desktop study concluded that implementation of ASR appeared to be feasible and that additional site specific exploration and testing was needed to further evaluate the feasibility of implementing ASR in Sanford, Florida.

Project Manager, City of Deerfield Beach, Florida. Mr. Wiseman served as project manager for the City of Deerfield Beach's water use permit renewal in 1992. This project involved optimizing the water supply in northeastern Broward County so Deerfield Beach and other legal users could continue to safely withdraw potable water from the Biscayne Aquifer. He was also involved in a similar project for the City of Coral Springs.

Project Manager, Orange County, Florida Landfill WQBEL. Mr. Wiseman has served as project manager for the Orange County Landfill WQBEL study. The purpose of this project was to establish water quality based effluent limits (WQBEL) for the surface water discharge from the landfill. The project included the collection of water quality samples for representative high and low flow conditions, and the performance of a water quality modeling analysis to establish the WQBELs. Following submittal of the WQBEL report, Mr. Wiseman was involved in extensive negotiations with the Florida Department of Environmental Protection (FDEP) and the U.S. Environmental Protection Agency (EPA) regarding establishment of the WQBELs and specific conditions for the Class III landfill operating permit. WQBELs were issued for the facility in 1997.

Professional Activities

American Academy of Environmental Engineers

American Society of Civil Engineers

National Groundwater Association

Water Environment Federation

Paul Roberts

Facilities Project Manager

Education

B.S. Chemical Engineering –
Auburn University 1962

Attended Annual Ardaman and
Association Classes on Dam
Inspection and Maintenance
(Rule 62 – 672 F.A.C.)

Mr. Roberts has 41 years of phosphate chemical plant experience. He progressed through operations, engineering, senior corporate staff, technology development and environmental to Operations Manager while associated with six (6) chemical plant sites, including five (5) with gypsum stacks, phosphate mine, corporate office assignments and port facilities.

Mr. Roberts spent eight years at a shutdown of a major phosphate chemical complex with activities as follows:

- Lead studies to remediate and upgrade plants within the facility to more competitive technologies,
- Lead development of closure plans and permits to close a major gypsum stack at the site including borrow sites,
- Lead technology development for the gypsum stack closure activities with major cost reductions in:
 - The movement of gypsum for lining and closure reconfiguration and grading
 - Acid water disposal with conventional facility rate and performance upgrades and alternative technologies
 - Water treatment sludge disposal methods,
 - Burrow soil cover costs
- All site administration, safety, security, human relations, engineering and environmental issues
- Lead 30 years of positive environmental agency interaction
- Thirty years of interaction with Hydro-geological consulting and engineering companies
- Supervised and/or interacted with all industry technical disciplines in addition to operation, maintenance and administrative staff
- Manager in charge at two facilities including Gypsum Stack Closure facility
- Developed, patented, designed, constructed and startup of a new chemical process plant

- Developed, patented, designed, constructed and startup of a new chemical process plant
- Attended Annual Ardaman and Association Classes on Dam Inspection and Maintenance (Rule 62 – 672 F.A.C.)

Activities:

- American Institute of Chemical Engineers
- National Fellow and Session Chairman
- Local Section Chairman
- Community Youth Groups and Church
- Numerous committees for environmental, Trade organizations, Governmental and Technology

Michael A. Cruz, CHMM

Project Engineer

Education

A.A. - Southeast Iowa Area
Community College
Coursework Missouri Western State
College and University of South
Carolina
Iowa Military Academy
U.S. Army School of Engineering,
Ft. Belvoir, Virginia

Training

Certified Hazardous Materials Manager-
2002 -Master's Level #011677
OSHA 40-Hour H&S
8-hour HAZWOPER Refresher
OSHA 8-Hour Supervisor
Certified Chevron Maintenance
Supervisor
DOT/HM 126F HAZMAT
Practical Loss Control Leadership
CPR/First Aid
Radiation Worker

Mr. Cruz has over 20 years of experience providing consulting, engineering, and construction services targeted at hazardous materials management and site cleanup. He has developed environmental legislation at state and federal levels, assisted owners with regulatory compliance, managed site cleanups under the U.S. Environmental Protection Agency's (U.S. EPA) REM III and ARCS programs, performed remedial investigations/feasibility studies under the Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response Compensation and Liability Act (CERCLA); and provided public relations support during site cleanup. Mr. Cruz's responsibilities have included project management, field supervision, cost estimating, procurement, schedule development and management, quality control, data management and reporting, and health and safety management.

Project Engineer. Site Remediation. Mr. Cruz is responsible for the quality and timely execution of work during the turn-key remediation of several cold war era landfills on a property in Orlando, Florida. The project includes the excavation, characterization, and disposal of soil and debris. Mr. Cruz has directed the removal of over 100,000 cubic yards of material. Mr. Cruz developed the project administrative system that includes schedule management, material tracking, transportation and disposal, excavation inspection, chemical analyses, and waste characterization. Mr. Cruz will write an Interim Measures Report for each landfill.

Project Engineer. Groundwater Extraction System. Mr. Cruz performed cost estimating, procurement, and constructibility review for a \$1.4 million groundwater extraction system for a confidential client in Orlando, Florida. The project included a stacked air stripper with a design flow of 1,000 gallons per minute (gpm). Mr. Cruz also developed subcontractor bid packages, evaluated subcontractor bids, and developed subcontracts.

Experience Highlights

- Over 20 years of construction and engineering experience
- Certified Hazardous Materials Manager
- Expertise in RCRA and CERCLA

Resident Engineer. Stormwater Retention Modification. Mr. Cruz served as quality control representative for a confidential client in Orlando, Florida. The project involved the relocation of two 10-acre stormwater retention ponds and the installation of over 3,000 feet of 10-foot by 10-foot concrete box culverts and ancillary reinforced concrete pipe that ranged in size from 36 inches to 96 inches. Mr. Cruz provided oversight for the owner as another contractor performed the work. In the end, the project was completed ahead of schedule and significantly under budget.

Construction Manager. Naval Undersea Warfare Center Remediation. Mr. Cruz managed site operations on this U.S. Navy Naval Undersea Warfare Center remediation project in New London, Connecticut. His responsibilities included client relations, onsite construction supervision,

health and safety, payroll, procurement, onsite sampling and analyses, and quality control. This \$3 million project consisted of removing polychlorinated biphenyls (PCBs) contaminated soil from numerous onsite locations, asbestos abatement, removal of PCB contamination from transformer pads, building demolition, underground storage tank removal and disposal, and the remediation of a fort built in the late 18th century.

Resident Engineer. American Thermostat EPA Superfund Site

Remediation. Mr. Cruz was resident engineer on this U.S. Environmental Protection Agency (U.S. EPA) three-phased remediation project at the American Thermostat Superfund Site in South Cairo, New York. The first two phases involved the excavation and onsite low temperature thermal treatment of approximately 100,000 cubic yards of soil contaminated with volatile organic compounds. The excavation, which extended to 35 feet below ground surface, required extensive shoring and bracing. The third phase involved the installation of 64 extraction and injection wells, the construction of a groundwater treatment facility, and placement of the majority of over 9,000 feet of double-wall HDPE transmission pipe with a directional drill. In this role, Mr. Cruz conducted constructibility reviews, analyzed subcontractor bids, and reviewed subcontractor submittals. Mr. Cruz also negotiated access agreements with impacted property owners. Mr. Cruz was also instrumental in developing excellent relations with those impacted by remediation; this phase of the project received an "exceeds expectations" evaluation from the U.S. EPA. The project was ISO 14001 audited with no deficiencies found.

Civil Superintendent. Interim Remedial Action. Mr. Cruz was responsible for the construction and operation of a temporary groundwater treatment system (30 gpm) at the Redstone Arsenal site in Huntsville, Alabama, for the U.S. Army Corps of Engineers. He also supervised the construction of several wells to depths of 150 feet as part of this interim remedial action program.

Resident Engineer. Crystal City Airport Superfund Site Remediation. At the Crystal City Airport superfund site in Crystal City, Texas, Mr. Cruz managed quality control for a project involving contaminated soil excavation, onsite chemical analyses of excavated soil, construction of a clay lined burial cell, transport of soil to the cell, and construction of a RCRA cap. This work was performed for the Texas Water Commission.

Field Operations Lead. Confidential Refinery, Texas City, Texas. Mr. Cruz wrote the Final Report and took part field activities in a Sensitive Receptor Survey of properties surrounding this facility. He also authored a Post Remedial Activities Report as a part of State requirements for the facility. Mr. Cruz was also the field operations lead for the annual and semi-annual sampling of over three hundred refinery monitor wells.

Wayne D. Winner, Sr.

Superintendent

Training and Certifications

OSHA 40-hour Hazardous
Waste Safety Training

OSHA 8-hour Annual Refresher
Training

OSHA Competent Person
Course for Trench Safety

Lead Awareness Training

Commercial Drivers License

Mr. Winner is a construction superintendent with over 30 years experience in all aspects of earthwork and pipeline construction, and project supervision. He has experience with large earthwork projects including landfill construction and closures, and gypsum stack closure and maintenance. Mr. Winner has participated in and supervised emergency and planned hazardous waste remedial actions, including excavation and removal of waste-contaminated surface and subsurface soils, underground storage tank removal and cleaning, spill response, drum sampling and disposal, and recovery of oil and debris. His supervisory experience includes fulfilling OSHA requirements relative to site work and excavation, coordinating transportation and disposal of hazardous wastes, soliciting and receiving bids for services and materials, and working with clients and on-site coordinators.

Supervisor. Earthwork for Landfill Cells. For CDM in Maitland, Florida, Mr. Winner has supervised several jobsites, including Universal projects in Orlando and Solid Waste Authority (SWA) in West Palm Beach. He supervised earthwork associated with the construction of new landfill cells. Mr. Winner has supervised the dewatering of excavation and fill areas for new landfill cells. He is providing oversight during all phases of construction, coordinating project scheduling, and tracking man-hour usage and subcontractor management for projects.

Experience Highlights

- Over 30 years of experience in Earthwork and Pipeline Construction
- Supervisor, Gypsum Stacks Closure and Waste Disposal project Central Florida

Supervisor. Gypsum Stacks Closure and Waste Disposal. For IT Corporation in Clermont, Florida, he supervised the closure of gypsum stacks and disposal of high phosphorus waters resulting from phosphate.

Supervisor. Storm Drainage, Groundwater Treatment Systems Installation, and Disposal of Contaminants. For IT Corporation in Clermont, Florida, Mr. Winner also worked in conjunction with Florida Department of Transportation (FDOT) in several cities supervising the installation of storm drainage and utilities throughout contaminated areas, setup and take down of groundwater treatment systems, and excavation of contaminated soil. Additionally, while with IT Corporation, Mr. Winner supervised the installation and operation of groundwater and soil treatment systems for cleanup of petroleum hydrocarbon-contaminated sites. He supervised installation of retention ponds and a liner in Atlanta, Georgia. Mr. Winner oversaw tank pulls and disposal. He supervised excavation, transportation, and disposal of landfill debris. For a fertilizer spill in Sebring, Florida, Mr. Winner supervised the cleanup. He also supervised removal of illegal tanks in Mims, Florida. Moreover, Mr. Winner supervised cleanup of a glue spill in Ocala, Florida.

Owner. Family-Owned Construction Business. For 10 years, Mr. Winner owned and operated his own construction business dealing primarily with excavation, land clearing and fill material.

Mechanic. Construction Equipment and Vehicle Repair. For a concrete company in Freeport, Texas, Mr. Winner serviced and repaired construction equipment and vehicles.

Commercial Truck Driver. Tire Company. Mr. Winner has his commercial drivers license and was a truck driver for a tire company.

Platoon Sergeant. U.S. Infantry Airborne. From 1966-1972 Mr. Winner was a Platoon Sergeant in the U.S. Infantry Airborne and supervised his platoon during training and served in Vietnam.

Jason M. Mills, P.G.

Geologist

Education

B.S. - Geology, University of
Florida (1985)

Mr. Mills is a professional geologist experienced in environmental sampling of a variety of media including groundwater and surface water, , environmental assessments, water resources and restoration projects.

Registration

Professional Geologist: Florida
(1998)

Senior Geologist, Universal Corporation Property Management (UCPM) Inc. (formerly owned by Universal Studios Inc.) Expansion Property, Orlando, Florida. He has served as the senior geologist performing geological services for the UCPM Inc. expansion property in Orlando, Florida. The 2,000-acre property, previously owned by Lockheed Martin and used for weapons systems production, is being developed for recreational and resort uses. CDM is handling permitting, assessment, design, and cleanup of six existing onsite hazardous waste landfills on a turnkey basis. Mr. Mills aided CDM in providing exceptional client service with revenues of more than \$15 million in work performed from 2001 to present. He has provided training for CDM personnel on implementing the new FDEP SOPs for surface water and groundwater sampling. The FDEP performed an audit on one of the UCPM semiannual groundwater sampling events, which Mr. Mills led, receiving one of the highest marks given by the state agency. Mr. Mills has sampled hundreds of monitoring wells and collected numerous surface water samples as part of an existing HSWA Permit requirement.

Geological Services, St. Johns River Water Management District (SJRWMD)/Seminole County Aquifer Storage and Recovery (ASR) Program, Markham, Florida.

Mr. Mills was responsible for the complete implementation and testing of the Lower Floridan exploratory well at the Markham site to obtain site specific data on hydrogeology and water quality in order to further assess ASR feasibility. Mr. Mills' responsibilities for program implementation included cost estimates, subcontractor negotiations (saving SJRWMD ~\$200K), providing technical geological input and field oversight.

Experience Highlights

- Senior Geologist, Universal Corporation Property Management project
- Experienced in environmental sampling and other remedial action tasks

Geological Technical Review and Oversight, St. Johns County Utility Department, St. Johns County, Florida. Mr. Mills provided technical input and oversight for the expansion of St. Johns County's well fields at their Tillman Ridge and World Golf Village sites. The program involved installing and testing Lower Floridan Aquifer exploratory wells and installing associated production wells.

Geologist, Various Water Resource Projects. Mr. Mills has served as a geologist providing technical input and oversight for deep well rehabilitations, Floridan Aquifer performance testing, and hydraulic load testing for a wetlands-based water reclamation project.

Project Manager, Various Environmental Assessment and Restoration Projects, U.S. Army Corps of Engineers. Mr. Mills was also project manager for several environmental assessment and restoration projects at the Avon Park Air Force range completed under the Total Environmental Restoration Contract (TERC) issued by the U.S. Army Corps of Engineers. He was responsible for management of all aspects of projects including proposal preparation, bid solicitation, subcontracting, work plans, feasibility studies, preliminary assessments, site assessments, NPDES permitting, right-of-way permitting, budgeting, cost tracking, scheduling, regulatory review, and client development. Mr. Mills was also project task manager for multiple environmental assessment and restoration projects at the Avon Park Air Force range completed under the TERC issues by the U.S. Army Corps of Engineers.

Field Work and Environmental Due Diligence Assessment, Sand Lake Road Complex, Orlando, Florida. Mr. Mills also provided field work for an environmental due diligence assessment at the Sand Lake Road complex. Responsibilities included surface water, sediment and soil sampling, oversight of 69 test pits in six landfills determining the depths and lateral extent of landfilled wastes, characterizing landfilled waste materials and soils, and confirmation of previous geophysical survey findings.

Co-Founder/President, J-Flo Systems, Inc., Orlando, Florida. Mr. Mills served as co-founder and president of J-Flo Systems, Inc. in Orlando, Florida. He developed an environmental company providing consulting services for restoring eutrophic lakes through inversion and organic biocatalytic technology. He installed two systems utilizing micro-bubble diffusers and organic biocatalytic enzymes to create inversion of lakes and reduce organic pollutants.

Field Work, Phase II Site and Remedial Investigations and Feasibility Studies, former McCoy Air Force Base, Orlando, Florida. He provided fieldwork for Phase II site and remedial investigations and feasibility studies at the former McCoy Air Force Base in Orlando. He provided soil and groundwater assessments for volatiles and semi-volatiles, pesticides, metals, sulfates, sulfides, and radionuclides under CERCLA and SARA guidelines.

CARs and Data Compilation, Petroleum Contaminated Sites. He completed Contamination Assessment Reports (CARs) and data compilation for petroleum contaminated sites in accordance with the requirements of the FDEP. Work included aquifer pump tests, topographic surveys, groundwater sampling, headspace analysis of soils using an organic vapor analyzer, monitoring well installations, and development. He assisted in the development of remedial action plans, compiled data for petroleum contaminated sites in accordance with FDEP requirements, and supervised numerous tank closure assessments involving the removal of petroleum underground storage tanks and contaminated soils.

Mr. Kovach is a highly capable and experienced environmental manager and consultant with extensive experience in the phosphate fertilizer manufacturing industry. His areas of specialty include phosphogypsum stack management/closure; phosphoric acid process water treatment and inventory reduction techniques; phosphate chemical plant closure, including process waste, PCB, asbestos, lead paint, and radioactive materials abatement; environmental regulatory compliance and programs; all phases and types of environmental permitting with particular expertise in surface and groundwater discharge and monitoring programs; contamination assessment and remediation; pollutant storage tank management; hazardous waste management; and pollution prevention/waste minimization.

EDUCATION AND PROFESSIONAL REGISTRAION:

B.S. Geology, *magna cum laude*. 1987. University of South Florida
Registered Professional Geologist (P.G.), Florida, No. 1438

PROFESSIONAL ASSOCIATIONS AND BOARDS:

- Florida Phosphate Council Air and Water Quality and Resources Committees, Member/Past Chair
- Florida Institute of Phosphate Research, Process Water Technical Advisory Committee, Member
- Tampa Bay Estuary Program, Management Board Member
- Tampa Bay Estuary Program, Technical Advisory Committee, Member
- Tampa Bay Nitrogen Management Consortium, Co-Chair
- Tampa Port Industrial Stormwater Discussion Group, Chair
- Florida Association of Professional Geologists, Member

PROFESSIONAL EXPERIENCE:

As a senior-level environmental professional with over 17 years of application in consulting and industry, Mr. Kovach's range of experience in the environmental field is extensive. His responsibilities have most recently included management and direction of environmental affairs and programs for CF Industries, Inc., one of the five phosphate fertilizer producers in Florida, with facilities in Hillsborough, Polk, and Hardee Counties. From 1996 through 2003, Mr. Kovach was directly responsible for all environmental permitting and regulatory compliance for the company's 2800-acre Bartow Phosphate Complex and two Port terminal facilities on Tampa Bay. The former facility is an idle processing plant that has not produced fertilizer since 1989; therefore, process water management and gypsum stack closure have comprised critical environmental program areas. Mr. Kovach's environmental management responsibilities at the Bartow Phosphate Complex have encompassed all associated site operations and activities, but in particular have included the following:

- Process Water Management – Oversight of NPDES treatment, discharge, and monitoring of over 2 billion gallons of phosphoric acidic process water using two-stage liming and aeration in compliance with FDEP permitting requirements and state surface water quality criteria; instrumental in the design and development of the industry's first large scale implementation of spray evaporative systems to reduce treated surface water discharges; designed and permitted wetland treatment systems and routing/storage enhancements to process and non-process effluent disposal systems in order to reduce nutrient loadings.
- Phosphogypsum Stack Closure – Permitting, design/alternatives collaboration, and compliance oversight for the \$60 million phased closure of the site's 900-acre gypsum stack and cooling pond; directly responsible for development of an innovative and highly cost effective cooling pond design; successful ERP permitting of 2.5 million cubic yard borrow pits to provide soil cover

- material for closure; development of long-term closure care and monitoring plans; preparation of associated regulatory and permitting submittals.
- Long-term Site Closure – Responsible for the development of all long-term site closure plans for the chemical plant and surrounding areas beyond the footprint of the gypsum stack, including process waste and sludge management; PCB, asbestos, and radioactive materials abatement; long-term process and non-process wastewater management; stormwater and groundwater management and monitoring, etc. Most recently (July 2004) oversaw the successful removal and TSCA disposal of all PCB transformers and large capacitors from the site, representing the largest quantity of PCBs at any single facility in Florida.
- Management and supervision of sight remediation and consent order compliance associated with process water impacts to groundwater.
- Participation on the FIPR Process Water TAC, which is currently working on long-term and short-term process water management and water balance strategies.

In addition to ongoing site closure work and environmental management for CF Industries, Mr. Kovach has recently been sought and retained for environmental management consultation for Coronet Industries, Inc., a phosphatic animal feed supplement producer in Hillsborough County that shut down all production in March 2004. Mr. Kovach is currently responsible for the preparation of internal environmental standard operating procedures (SOPs) to be used during facility shut-down and decommissioning as site operators move through closure. Coronet shares many of the water management issues associated with phosphate fertilizer producers in the region.

Mr. Kovach's professional experience also includes:

- Manager for permitting and compliance of CFI's one million ton-per-year anhydrous ammonia and bulk fertilizer terminal facilities in the Port of Tampa.
- Design, execution, management, and reporting of various environmental assessment, remediation, reclamation and closure projects
- Development and implementation of corporate environmental training programs; preparation of technical conference presentations; and public speaking. Over the past 10 years, Mr. Kovach has specialized in client/company representation with a focus on regulatory agency negotiations and stakeholder facilitation. He played a key role in facilitating industry participation in the Tampa Bay National Estuary Program's *Comprehensive Conservation and Management Plan* and in the development and success of the Nitrogen Management Consortium, a public-private partnership committed to an effective, non-regulatory approach to reducing nutrient loads to the Tampa Bay estuary which remains a model for watershed management nationwide.
- Development and implementation of regulatory program compliance plans (BMP/pollution prevention/waste minimization plans; Spill Control and Countermeasure (SPCC) plans; emergency response and contingency plans, health and safety plans; groundwater monitoring plans; operation and maintenance plans; decommissioning plans; etc.).
- Extensive experience in the preparation, negotiation, supervision, and administration of contracts; field supervision; contractor direction and supervision; and data quality assurance/quality control.
- Extensive technical writing and editing experience; close collaboration with legal counsel and strong practical background in environmental law and liability concepts and issues; has assisted in the negotiation of numerous settlement agreements, consent orders, and decrees.

Work History:

- 2003 – 2004: **QUIETEARTH CONSULTANTS, INC.**, Riverview, FL
President, Principal Scientist
- 1996 – 2003: **CF Industries, Inc.**, Bartow, FL
Superintendent Environmental Affairs, Bartow Phosphate Complex/
Tampa Port Facilities
- 1995 – 1996: **QUIETEARTH CONSULTANTS, INC.**, Lutz, FL
President, Principal Scientist
- 1992 – 1995: **ENVIRONMENTAL CONSULTING AND TECHNOLOGY, INC.**, Tampa, FL
Senior Project Manager
- 1987 – 1992: **J.B. BUTLER & ASSOCIATES, INC.**, Tampa, FL
Hydrogeologist/Senior Scientist

Other Skills and Experience:

- Extensive experience involving review and interpretation of state and federal environmental regulations; public comment during rulemaking.
- Prepared FDEP-approved site specific and comprehensive QA Plans.
- Multidisciplinary project management experience.
- Monitor and recovery well design, geologic logging, drilling direction, and supervision.
- Extensive experience in environmental sampling and interpretation of environmental data.
- Variety of construction and engineering experience.
- Computer literate; AutoCAD® drafting skills.
- Occupational Safety and Health Administration (OSHA) hazardous waste site safety certification.
- Mine Safety and Health Administration (MSHA) mining facility safety certification.
- DOT Hazardous Materials/Waste Transportation Certification.

PUBLICATIONS:

Young, E.B.J., and C.A. Kovach, 1995. Study of the Durability of a PVC Geomembrane-Lined Pond without Soil Cover. In *Geosynthetics '95 Conference Proceedings*. Industrial Fabrics Association International, St. Paul, Minnesota. Vol. 3, p. 907-919.

VAUGHN V ASTLEY

2120 CLUHOUSE ROAD, LAKE LAND, FLORIDA 33813
PHONE (863) 619-9765 • E-MAIL REDWARF246@AOL.COM

EXPERIENCE

Thirty five plus years of professional experience in the phosphate and water treatment businesses, with progressive responsibility in managerial positions in Technical Services and Research and Development roles. Experience has included the management of R&D, process and project engineering, and the resolution of problems requiring significant chemical process insight. Extensive international project evaluation work has been carried out together with the development of major projects to commercialization.

EDUCATION

Graduate of Royal Society of Chemistry, Salford University, Manchester, England, 1969

PhD Chemistry, Salford University, Manchester, England. 1972

Chemical Engineering Courses at Tulane University, New Orleans, La. 1983-85

TECHNICAL MEMBERSHIPS

Member of Technical Sub-Committee, International Fertilizer Association, Paris;
Chemical Processing Technical Advisory Committee, Florida Institute of Phosphate Research;

Engineering Advisory Council, University of South Florida;

Member of Engineering Advisory Council, Florida Institute of Technology;

Member of the American Chemical Society, and the Society of Mining Engineers;

Member of the Royal Society of Chemistry, MRSC, CChem, CSci.

PROFESSIONAL WORK HISTORY

IMC Phosphates

1996-Present *Vice President Technology Development*, New Wales, Florida

In 1996 I was instrumental in the justification and inception of the new Technology Development Group. I am solely responsible for an annual budget of about \$4 million of which 50 percent is spent externally on University research, consultants, contractors, and on technical demonstrations. I am responsible for research and development related to all aspects of the mining of phosphate rock, the manufacture of phosphate fertilizers and the development of new products and processes.

- Staff includes 10 professional and 4 permanent and 5 temporary technicians.
- Successfully developed several novel processes in many areas of our operations, and challenged many paradigms related to manufacturing methodologies.
- A consolidated mine concept, generated by our TD group, will save over \$100MM of NPV savings in capital expenditures avoiding the building of a new beneficiation facility.
- Developed a thickened clay process which reduced dam construction and increased water utilization rates.
- Computer controlled process automation in both rock flotation and phosphoric acid manufacture has resulted in improved recoveries and plant capacities.

1991-1996

Technical Services Manager, Louisiana Operations Uncle Sam, Faustina and Taft, Louisiana

As technical manager for Agrico's Faustina, Uncle Sam, and Taft phosphoric acid and DAP production sites, I was responsible for all the laboratories, process and project engineering groups, and all development and co-ordination of the process improvement efforts. The Louisiana pond water balances, although somewhat different to Florida, dictated a thorough understanding of the issues of handling the various water streams and resulted in an excellent water management plan. The covering of the gypsum stacks and the modifications to the water shed and the stack under-drains, contributed much to the ability to handle the abnormal rain events that can occur in Louisiana.

1981-1991

Manger Chemical Process Development, Belle Chasse, New Orleans, Louisiana

Since joining Freeport-McMoran in 1981, experience included the planning and direction of Research & Development programs related to FMI's frash sulphur, fertilizer, uranium, and geothermal operating units. Major projects included Main Pass 299 and process manager for a modular 1MM tpa sulphur purification plant built in Tulsa, Oklahoma, relocated to, and commissioned in Mosul, Iraq.

A significant proportion of the sulphur related work included the treatment of seawater to enable heating to 300 F, and the reheating of bleedwater to Frasch mining temperatures, both without the formation of scale. The control of calcium scaling compounds was an integral part of the development work, and led to much of the current insight and the development of our present pond water pre-treatment technologies. The experience gleaned in the geothermal brine industry also was invaluable in developing a solid understanding of scaling solutions.

Albright & Wilson, England

1973-1981

Technical Manager Phosphates Complex Whitehaven, Cumbria, England

After graduation, industrial research included laboratory, pilot plant operations and full scale test-work, which was coordinated with respect to the production of wet process and purified technical grade phosphoric acid, and various phosphate products, including detergents, fertilizers, and food grade phosphates.

1964-1969

Assistant Chemist Oldbury, Worchestershire, England.

Initial work with Albright and Wilson was in the thermal phosphorus and technical grade phosphoric acid areas. I was responsible for design, construction and completion of laboratory experimental test work and various phosphate plant troubleshooting and commissioning.

JAMES W.M. VAN NORTWICK, Jr., Ph.D., P.E.

3726 North Wayne Avenue
Chicago, Illinois 60613
(773) 348-1978

SUMMARY

Dr. Van Nortwick has more than twenty years of environmental engineering and environmental program management experience, primarily with IMC Global Inc., a leading international producer and supplier of agricultural products (phosphates and potash), chemicals, and salt; the environmental engineering consulting firms of RMT, Inc. and DAI Environmental, Inc., the U.S. Environmental Protection Agency, and the U.S. Army Corps of Engineers. In addition, he was previously an environmental engineering instructor and research associate at the Pritzker Department of Environmental Engineering at the Illinois Institute of Technology and the Center for Hazardous Waste Management at the Illinois Institute of Technology Research Institute.

Dr. Van Nortwick has developed and managed company-wide environmental programs, including the establishment of policies, guidelines, and procedures as well as key performance indicators, measureables, and business unit goals. He has also assisted in the transformation and implementation of a company-wide health and safety program focused on a people-based safety culture and leading performance indicators. Dr. Van Nortwick is a skilled environmental planner, regulatory analyst, and environmental policy developer with experience at forecasting trends for industry and government agencies. He is also an experienced negotiator, often acting as liaison between his company and regulatory authorities, legal agents, and the public.

Dr. Van Nortwick manages environmental liabilities based on regulatory requirements and trends, environmental risks at the facility, perceived corporate risks (e.g., public relation issues, share holder concerns, and political ramifications), economic indicators, financial and legal consequences, and corporate commitment. He has managed a holding company for the remediation and disposition of legacy sites and underutilized assets located throughout the United States, Canada, Australia, and Europe with a focus on achieving business-oriented solutions. Dr. Van Nortwick has also managed a branch office for a national environmental engineering consulting firm and supervised large remediation projects, provided technical support during environmental litigation, implemented hazardous waste management and waste minimization programs, and has assisted in the development and implementation of process optimization and continuous improvement protocols. In addition, he has also conducted environmental, health and safety audits of ongoing manufacturing operations and acquisition candidates.

IMC Global Inc.

Director of Environmental Affairs (1998 – Present) *Corporate Headquarters – Lake Forest, Illinois*

EXPERIENCE

As Director of Environmental Affairs, Dr. Van Nortwick is responsible for implementing and managing a company-wide environmental program focusing on regulatory compliance, environmental stewardship, and operational excellence. He interacts with Board of Directors and Corporate management regarding critical environmental and health and safety issues; recommends reserve levels, provides input for the annual disclosure, conducts environmental due diligence in support of transactions and financing; provides environmental compliance assistance to the business units; develops and implements company-wide EH&S policies, guidelines and procedures, and provides technical assistance for the formulation and implementation of business unit corrective action plans to resolve open environmental audit items. Dr. Van Nortwick also manages critical environmental issues, process optimization projects, restructuring strategies, and vendor consolidation initiatives.

Dr. Van Nortwick provides litigation support for toxic tort suits, environmental justice actions, and regulatory enforcement actions including: Environmental Justice, Toxic Tort, Clean Water Act enforcement, RCRA and CERCLA enforcement, and U.S. Fish and Wildlife enforcement

EXPERIENCE

suits, Cease and Desist Orders, Department of Justice Settlement Orders, and international property sales. Dr. Van Nortwick also provides assistance to the business units regarding hazardous and radioactive waste issues, waste recycle/reuse investigations, EH&S training, and process bottleneck identification. During the period from November 2002 to present, Dr. Van Nortwick has also been responsible for assisting with the development and implementation of a company-wide health and safety program, including the establishment of a people-based safety culture, safety policies and procedures, selection of performance indicators, and incident tracking.

IMC Global Inc.

Manager of Vigindustries, Inc (1999 – Present)
Corporate Headquarters – Lake Forest, Illinois

As the Manager of Vigindustries, Inc., a subsidiary of IMC Global, Inc., Dr. Van Nortwick is responsible for managing the remediation and disposition of legacy sites and underutilized assets located throughout the United States, Canada, Australia, and Europe with a focus on achieving business-oriented solutions. Dr. Van Nortwick's responsibilities include:

- Identification and quantification of potential liabilities
- Evaluation and prioritization of all property remediation activities
- Management of all supplier contracts and indemnification agreements
- Establishment of schedules, budgets, projected costs, and appropriate reserves
- Community relations and negotiations with State and Federal Agencies
- Management of enforcement actions and sale of remediated properties
- Property Sales: 1998 – 2003: \$5.5 MM
- Operating Budget: 1998 – 2003: \$3 - 10 MM/yr
- Company Assets (reserves): 2003: \$25 MM

Environmental affairs conducted at these properties and the costs associated with these actions are controlled by a variety of agreements for indemnity by former property owners and regulatory authorities. As a result, Dr. Van Nortwick frequently interfaces with legal counsel, arbitrators, indemnifiers, and numerous State and Federal agencies. In addition, Dr. Van Nortwick is responsible for preparing the environmental representation and warranties language for acquisition and divestiture agreements and contracts, particularly the indemnification provisions, and manages projects consistent with these agreements to maximize recoveries or minimize pay-outs under indemnification provisions.

Ph.D. Environmental Engineering, Illinois Institute of Technology, 1991

M.S. Environmental Engineering, State University of New York at Buffalo, 1982

B.S. Civil Engineering, State University of New York at Buffalo, 1980

Registered Professional Engineer in **Arizona** (No. 292233)

Registered Professional Engineer in **California** (No. C 055207)

Registered Professional Engineer in **Florida** (No. 004612 – Inactive)

Registered Professional Engineer in **Illinois** (No. 062-045607)

Registered Professional Engineer in **Indiana** (No. 19600380)

Registered Professional Engineer in **Iowa** (No. 12621)

Registered Professional Engineer in **New Jersey** (No. 165766)

Registered Professional Engineer in **New York** (No. 074529 - Inactive)

Registered Professional Engineer in **North Carolina** (No. 18724)

Registered Professional Engineer in **South Carolina** (No. 15002)

Licensed General Engineering Contractor in **California** (No. 704293)

KENNETH J. JARDINE

324 EASTWAY DRIVE LAKE LAND, FLORIDA 33803

PHONE (863) 646-1644

EXPERIENCE

I have over twenty five years professional experience with progressive responsibility in technical positions. Experience has included basic process research, process development, pilot plant design operation and supervision and commercial plant start-up and operation.

EDUCATION

BA in Chemistry, Long Island University, C.W. Post College, 1969

Graduate Chemistry Courses, Ohio University Graduate College, 1970

PROFESSIONAL WORK HISTORY

1996-Present

IMC Phosphates

Technology Development Group

Chief Engineer

Responsible for the development and application of advanced technology to phosphate mining and fertilizer production.

- Worked as member of team that developed a pretreatment technology that allows phosphate plant pond water to be purified using reverse osmosis. This effort resulted in the granting of two patents and with the technology being successfully demonstrated on a 600,000 GPD plant scale at the Piney Point Phosphate Plant.
- Developed processes for producing tri-ammonium phosphate and incorporating it into DAP. Process was successfully demonstrated at 800 pound/hour pilot scale. Obtained two patents covering process.
- Developed test methods and mathematical models for testing and evaluating small samples of phosphate rock for the production of phosphoric acid.
- Responsible for patent and trademark searches. Routinely handle transmittal and receipt of department confidentially and secrecy agreements.
- Worked as contract engineer during formation of Technology Development Group on projects directed at indirect sensing of phosphate rock quality and up-grading low grade rock.

1995

Phosphate Engineering and Construction Company

Senior Process Engineer

Managed pilot plant project to produce HF grade calcium fluoride and phosphoric acid from fluosilicic acid and phosphate rock.

- Responsible for hiring and training operators, plant start-up and pilot test program.
- Developed heat and material balances and coordinated pilot operations with client.

1981-1993

IMC Fertilizer

Development Engineering Group

Senior Development Engineer

Responsible for new product and process development, process improvement, plant trouble-shooting and the application of new technology at the New Wales fertilizer and uranium recovery plants.

- Developed and installed computer based electronic log sheets incorporating artificial intelligence for various production plants.
- Developed improved method for measuring phosphoric acid plant recovery based on automatic composite sampling of gypsum sluice lines. Designed sample probe assemblies for pressurized lines that allowed probes to be removed while line was in use.
- Supervised major pilot program to produce technical grade phosphoric acid from wet process acid using solvent extraction.

1976-1981

Wyoming Mineral Corporation / Westinghouse Electric

Associate Process Engineer

Responsible for pilot plant operations, commercial plant start-up and process improvement of a solvent extraction uranium recovery plant.

- Responsible for design, fabrication and operation of bench scale, second cycle, uranium refinery portion of process.
- Served as shift engineer during start-up of commercial plant.
- Participated in several overseas business development ventures.

April 1976-Nov. 1976

Conserv, Inc.

Shift Chemist

Responsible for routine quality control analyses and analytical methods development of a phosphate fertilizer plant.

Nov. 1975-April 1976

Gulf Oil Chemicals Company

Operator Analyst

Responsible for operation, maintenance and analytical testing at a pilot plant to recover uranium from phosphoric acid.

Sept. 1970-Nov. 1975

Construction Industry Experience

Employed in various types of construction (residential to heavy industrial) in capacities ranging from carpenter to general foreman.

PATENTS

4,446,114	Method of Increasing the Strip Coefficient of the Strip Solution in a Reductive Stripping Uranium Recovery Operation
6,241,796	Method for Producing Fertilizer Grade DAP Having an Increased Nitrogen Concentration from Recycle
6,280,494	Method for Producing Fertilizer Grade DAP Having an Increased Nitrogen Concentration in a Spray Column
6,758,976	Simplified Purification of Phosphoric Acid Plant Pond Water
6,758,977	Purification of Phosphoric Acid Plant Pond Water

JERRY E. LISTER
6810 Palomino Drive
Lakeland, Florida 33811

Telephone: (863) 644-1519
Email: jelister@aol.com

SUMMARY

Production Supervisor with 23 years' experience in plant operations. Diversified experience in production, project management, planning turnarounds and working with outside contractors. Experienced in double lime treatment of pond water.

PROFESSIONAL EXPERIENCE

IMC PHOSPHATES (formerly Conserv, Inc.), Nichols, Florida

1980 to 2003

Supervisor, 2000 to 2003

Responsible for supervising a crew, monitoring equipment, running the liming station and the quality of water discharged to the waters of the state.

- Supervised the daily operation of the Nichols liming station. We were able to treat up to 900,000 gallons of pond water.
- Performed daily inspections of the Gyp Stack and the total perimeter containment system. Reviewed the monthly Gyp Stack water balance reports.
- Completed all requisitions necessary to purchase lime, miscellaneous supplies and contractor work.

Superintendent, 1991 to 2000

Responsible for the Gyp Stack, Phos Acid, Evaporator, and Ball Mill. Supervised six Supervisors and 34 Operators. Established annual budgets and production goals. Reviewed cost and production goal status on a monthly basis taking appropriate action.

- Started up the lime treatment station, that had not run for several years.
- Managed, organized and planned annual plant "turnarounds" which were required in order to clean and repair equipment. Oversaw all required tasks with minimal downtime
- Coordinated production activities and trained Supervisors and Operators in the operation and trouble shooting of various areas of the plant.

Production Coordinator, 1988 to 1990

Coordinated production and maintenance activities in the Phos Acid Department. Maintained supplies essential to plant operation.

- Coordinated with Plant Engineer on construction of third filter addition.
- Planned and organized repair days to perform cleaning activities by operations and scheduled maintenance repairs.
- Scheduled vacation coverage and Temporary Supervisor coverage.
- Worked with outside Contractors that were performing work inside the plant.

Shift Supervisor, 1981 to 1988

Responsible for the operation of the Phos Acid, Evaporator, Ball Mill and Gyp stack. Supervised eight Operators that ran the various plants.

- Supervised plant operations for the Phos Acid Department.
- Trained Operators in operation and troubleshooting of the various areas of the plant.
- Conducted monthly safety meetings.

EDUCATION

POLK COMMUNITY COLLEGE, Winter Haven, Florida.
AA Degree in Business Management

UNIVERSITY OF SOUTH FLORIDA, Tampa, Florida
Continued work on Business Management for one year.

Dennis Michalski

Education:

B.S. from Univ. of Illinois 1967, Post graduate work in Chemistry at Loyola of Chicago in the 1980's, Post graduate work in Chemistry at Univ. of South Florida in the 1990's.

Experience:

IMC 2000-2004: Chief Engineer Technology Development I have worked heavily the last 3 years on pre-treatment of many phosphate plant pond waters. The pre-treatments are necessary to use reverse osmosis for treatment. Most recently was on team that discharged 46million gallons of permeate made from Piney Point pond water.

Mulberry Phosphates 1994-1999: Engineering Manager. Designed system which treated phosphate cooling pond water and released 18 million gallons of reverse osmosis permeate.

IMC 1985-1993: Senior Engineer at New Wales Pilot Plant

IMC 1979-1984: Chief Chemist in Florida at New Wales Phosphate facility.

IMC 1970-1978: Worked in Corporate Research both Organic and Inorganic in Illinois and Indiana.

Achievements:

Have been granted 7 patents for work in Phosphates, two are for treating pond water for discharge.

Member of Florida Institute for Phosphate Research Technical Advisory Committee.

Received annual Presidents award in 2003 for innovative plant project with Phosphates.

WILLIAM N. FUTCH

5831 COVEVIEW COURT LAKE LAND, FLORIDA 33813
PHONE (863) 644-3227 • E-MAIL WNFUTCH@MSN.COM

EXPERIENCE

I have thirty two years professional experience with progressive responsibility in managerial and technical positions. Experience has included production management, project engineering, and technical management.

EDUCATION

Bachelor of Industrial Engineering, Auburn University, 1971

PROFESSIONAL WORK HISTORY

IMC Phosphates

Sept. 2001-Present

Concentrates Operations

Manager-Technology Development

Overall responsibility for phosphate concentrates development activities.

- Responsible for the construction and operation of pilot and 600 thousand gallon per day demonstration plant. This demo plant proved IMC's patented technology for pretreating phos acid cooling pond water to allow reverse osmosis processing without scaling the membranes.

Jan. 1998-Aug. 2001

New Wales Plant, Mulberry, Florida

Granular Production Manager

Production responsibility for five granular fertilizer plants which produced 3.8 MM tons per year finished product. Products include diammonium phosphate, granular and powdered monoammonium phosphate, and several speciality fertilizers.

- Reduced OSHA accident rate to 20% of the previous rate.
- Responsible for \$10 MM conversion of a granular triple super phosphate plant to granular monoammonium phosphate.
- Achieved dramatic product quality improvements to meet Chinese and Australian requirements.
- Developed new granular monoammonium phosphate manufacturing method. Also started production of several new specialty brands.

Jan. 1993-Dec. 1997

New Wales Plant, Mulberry, Florida

Phos Acid Production Manager

Production responsibility for three phosphoric acid plants which produced 1.8 MM tons per year.

- Dramatically improved recoveries.
- Set numerous production records.
- Implemented computer control of the production process.
- Increased run time between repair days from one to three weeks.

- Apr. 1991-Dec. 1992 New Wales Plant, Mulberry, Florida
Uranium Production Manager
 Production responsibility for three primary uranium extraction plants (two were located offsite at CF Industries) and the secondary plant plus refinery. These plants produced 2.0 MM pounds per year uranium oxide.
- Set numerous recovery and volume records.
 - Eliminated a major production step which reduced cost \$10 per pound of product.
 - Demolished these plants and cleaned the site.
 - Performed due diligence of Agrico uranium extraction plants prior to 1993 merger.
- Jan. 1987-Mar. 1991 New Wales Plant, Mulberry, Florida
Uranium Production Superintendent
 Production responsibility for day to day operation of the primary uranium extraction plant.
- Set numerous production records.
 - Improved recovery.
 - Reduced raw material consumption.
- Jul. 1980-Dec. 1986 CF Industries Bartow and Plant City, Florida
Production Coordinator
 Responsible for coordinating technical and production activities at IMC's primary uranium extraction plants located at CF Industries phosphate facilities.
- Responsible for debugging and start-up.
 - Developed and implemented many process improvements.
- Mar. 1978-Jun. 1980 New Wales Plant, Mulberry, Florida
Project Engineer
 Responsible for design and installation of various projects.
- Responsible for the detailed design and cost control for two (\$60 MM each) primary uranium extraction plants.
 - Responsible for design and construction of a \$4 MM fertilizer storage and shipping facility.
- Mar. 1972-Feb. 1978 **Brown & Williamson Tobacco Company**
 Petersburg, Virginia
Production Superintendent responsible for cigarette fabrication.
 Two year management training program.
Industrial Engineer – coordinated move into new cigarette fabrication and leaf processing facility.

JOHNNY M. PREWITT

6741 NELLS WAY LAKE LAND, FLORIDA 33813
PHONE (863) 701-0342 • E-MAIL JPREWITT1@TAMPABAY.RR.COM

EXPERIENCE

I have thirty two years professional experience with progressive responsibility in technical and managerial positions. Experience has included operations management, process and project engineering, technical management, environmental permitting and environmental monitoring management.

EDUCATION

BS in Chemical Engineering, Mississippi State University, 1972
Executive Program, Louisiana State University, 1992

PROFESSIONAL WORK HISTORY

- | | |
|--------------|--|
| 1999-Present | IMC Phosphates
Concentrates Operations
<u>Manager-Gypsum Stacks</u>
Responsible for permitting, design, construction, closure and all aspects of regulatory compliance for company's gypsum stacks in Florida and Louisiana. Also responsible for idle Nichols facility. <ul style="list-style-type: none">• Annual capital spending level of \$20M• Successfully concluded permitting process for closure of gypsum stack which experienced sinkhole in 1994. |
| 1997-1998 | South Pierce Plant, Mulberry, Florida
<u>Operations Manager</u>
Overall responsibility for fertilizer facility employing 250 people. Products include granular triple superphosphate, phosphoric acid, sulfuric acid, and hydrofluosilicic acid. <ul style="list-style-type: none">• Reduced OSHA accidents to half previous rate.• Reduced maintenance spending by \$1.4M.• Implemented process revisions to allow operation through el nino rainfall without requiring process water discharge.• Achieved record production levels. |
| 1995-1996 | Faustina Plant, Donaldsonville, Louisiana
<u>Production Manager</u>
Responsible for production activities in plant employing 350 people – 160 in production. Products include granular ammoniated phosphates, phosphoric acid, sulfuric acid, ammonia and urea. <ul style="list-style-type: none">• Upgraded ammonia capacity• Closed old gypsum stacks and started new one.• Increased energy efficiency of sulfuric acid plants. |

- 1991-1994
Uncle Sam Plant, Uncle Sam, Louisiana
Production Manager
Responsible for production activities in plant employing 300 people – 120 in production. Products include phosphoric acid, sulfuric acid, uranium, hydrofluosilicic acid, and silicon tetrafluoride.
- Achieved record production rates.
 - Started up 3200 TPD sulfuric acid plant.
 - Developed IMC compatible production reporting system.
- 1986-1991
Uncle Sam Plant, Uncle Sam, Louisiana
Technical Manager
Responsible for process engineering, plant technical support, process development, project engineering and management of capital projects. Also managed laboratory, environmental monitoring programs, and environmental permitting activities.
- Coordinated construction and startup of byproduct silicon tetrafluoride facilities.
 - Increased phosacid reactor circulation to improve recovery.
 - Guided development of gypsum stack closure plans and permitting.
- 1980-1986
Uncle Sam Plant, Uncle Sam, Louisiana
Technical Services Superintendent
Responsible for process engineering, laboratory, and environmental monitoring programs. Reported to the technical manager.
- 1978-1980
Uncle Sam Plant, Uncle Sam, Louisiana
Assistant Production Superintendent
Responsible for day-to-day operation of phosphoric acid plant. Coordinated production and maintenance scheduling, trained operators, and resolved process problems.
- 1976-1978
Uncle Sam Plant, Uncle Sam, Louisiana
Project Leader
Performed technical studies related to plant operation, provided daily technical support, and developed processes related to solvent extraction of uranium.
- 1972-1976
E.I. DuPont Company
Cape Fear Plant, Wilmington, North Carolina
Process Engineer
Provided support to operations personnel in solving technical problems. Developed mechanization equipment in textile fibers plant.

Name: John O'Connor

Title: Project Engineering Manager

Education: Manhattan College, BCE 1964, Villanova University Graduate Work 1969

Mr. O'Connor has over forty years experience in multi-disciplined project engineering and management. Other activities include FIPR Chemical Process TAC, Supervisor-Manatee River Soil and Water Conservation District (Elected), Founder/President Florida West Coast Resource Conservation and Development Council, and Founder/Former President-Palmetto FFA Alumni Chapter.

Representative project assignments include:

- Project Manager for Penn Pro - Designed and installed portions of gypsum stack closure including HDPE pipe lines, energy dissipater structure, several pumping systems and bridges. Currently managing dredge to remove gypsum from process water cooling pond.
- Project Superintendent for Environmental and Geotechnical Projects for IMC, recruited and assigned to unique multi-million dollar projects. Responsible for selecting and overseeing staff for projects.
- Carried out unique design to remediate and repair 110'x185' sinkhole in 200' gypsum stack/injecting 4,000 cu. yd special mix grout using 50 injection casings, re-establishing impermeable layer, protecting Floridian aquifer, and providing round the clock project control. Completed on schedule and within budget (\$7MM).
- Supervised demolition of uranium processing facility developing action plan/scope of project/soliciting proposals for salvage/demolition/environmental remediation (\$1MM).
- Designed/constructed level control structure under emergency conditions in phosphate chemical complex cooling pond passing flow in excess of 120,000 GPM reducing downstream water level/avoiding complete plant shutdown/saving millions
- Supervised design/installation HDPE liner for cooling pond-gypsum stack/sustaining continuous plant operation (\$16MM).
- Supervised design/installation of 4000 ft. bentonite cut off wall, 20,000 GPM pond water pumping station and 40 acre HDPE lined storm surge pond with associated dam modifications (\$4MM).
- Project Engineering Superintendent, for world's largest phosphate chemical complex, responsible for department of 10-20 multi-discipline project engineers, outside consultants, and designers providing all capital project requirements.

Name: Robert A. Herz, P.E.
Title: Project Manager
Education: Bachelor of Mechanical Engineering, Georgia Institute of Technology, Atlanta, Georgia.
Professional Engineer, Mechanical Engineering, Florida.

Mr. Herz has twenty-six years experience in project engineering, project management and construction management on projects in seven industries and several government agencies. His experience includes project development from original concept to plant startup.

Representative project assignments include:

- Project/Construction Manager, responsible for installation of brewery water filtration system, which included procurement, mechanical, piping, structural, electrical and instrumentation. Coordinated work with six subcontractors. Provided startup services for client, Anheuser-Busch Brewery, Tampa, Florida.
- Project /Construction Manager, responsible for all mechanical and piping procurement and installation on a wastewater treatment plant. Coordinated work with clients and other general contractors on the project for Anheuser-Busch Brewery, Jacksonville, Florida.
- Construction Manager, responsible for nitric acid digester. This was a turnkey project that included demolition of existing digester system, procurement and installation of a new storage tank, unloading facility, transfer piping and digester for Hercules Chemicals, Vero Beach, Florida.
- Project/Construction Manager, responsible for engineering through startup for conversion of safety wash stations to potable water for the entire chemical complex for CF Industries, Plant City, Florida.
- Project Engineer, responsible for engineering, supervision of designers and development of procurement and contract documents for the conversion of a sulfuric acid plant's acid cooling system from fresh water to recycled process water, recovery of all waste steam condensate and replacement of cooling tower with heat exchangers for CF Industries, Bartow, Florida.
- Project Manager responsible for engineering, design, procurement, construction and startup service of a granular monoammoniumphosphate (MAP) plant. Managed all personnel for the project under contract from IMC Phosphates, Mulberry, Florida.

Name: Jim Pardee

Title: Senior Project Manager

Education: B. S. Mechanical Engineering, University of Florida, Gainesville
Professional Engineer, Mechanical Engineering, Florida

Mr. Pardee has over forty years of experience in project engineering, management, construction and client liaison. Representative project assignments include:

- Piney Point Reverse Osmoses Plant - supervised study of preliminary design of the proposed RO plant to be located at Piney Point, Florida. Included process and mechanical design to utilize existing equipment, and selection of new equipment. Also included the determination of required existing equipment modification, and selection of complementary new equipment to yield logical cohesive design within the projects cost and schedule restraints.
- Piney Point to Port Manatee Treated Water Pipe Line -Engineered, selected (specified, obtained quotations, and initiated purchase of) major equipment. Also supervised design, and installation, of the transfer system.
- Cargill No. 6 DAP Plant Fugitive Dust Collection System - engineered and supervised detail design of the ductwork.
- Project engineering and design management including the following tasks: Process, and mechanical design; Design supervision; Economic studies, and estimates; Capital requests; Specifications, vendor inquiries, and initiation of purchase; Project engineering, procurement, and construction scheduling; Author contractor project technical documentation; Contractor selection, and technical field supervision; Manage project startup operation; Specialized in the design of matrix and clay slurry pumping systems.

Projects participated in, in one or more of the above capacities include:

- Replaced low-pressure process water piping system at Ft. Green.
- Clay consolidation upgrade, at Hope Well.
- Clay pumping systems studies at Ft Green, Hopewell, Four Corners, and Kingsford.
- Demolition of Noralyn plant facilities.
- Preliminary design of clay consolidation facilities at Ft. Green and Four Corners.
- Economic study, comparing the long-range (10 to 20 year) cost of consolidated versus conventional disposition of clays.

Name: Richard C. Hardy

Title: Mechanical Engineer

Education: B. S. Mechanical Engineering, University of Florida, Gainesville.
Minor: Materials Science and Engineering, EIT Certified, Candidate # 00066.

Mr. Hardy has eight years experience planning and implementing various projects throughout the industry. Representative project assignments include:

Penn Pro Engineering and Technical Services, Mulberry, Florida

- Designed 18,000-foot HDPE pipeline for pumped water process water.
- Designed rainwater runoff pump system.
- Performed performance analysis of petroleum storage pumps.

Tampa Armature Works, Tampa, Florida

- Project Manager of an eight-month refurbishment of a combined cycle turbine generator accessory base on a budget of \$150,000.00. The project was completed two weeks ahead of schedule and 12.5% under budget.
- Planning and design of the production of lines for mining equipment, switchgear enclosures, and support equipment

Milliken and Company, Thomson, Georgia

- Responsible for the acquisition and renewal of all environmental licenses and permits required for textile manufacturing
- Production efficiency Process Improvement Engineer enhanced systems through statistic analysis and process control improvement.

United States Air Force

Communications - Electronics Technician

- Electronics technician with a background in autotrack radar, HF radio, and SHF satellite communication equipment.
- Maintenance control technician responsible for the completion and documentation of all required Preventative Maintenance Inspections and corrections for "out of tolerance" conditions.
- Currently holds a Top Secret security clearance
- Currently an active member in the Florida Air National Guard.

Name: Richard P. Chruszcz, PE

Title: Senior Electrical Engineer

Education: BSEE University of Florida Electrical Engineering Power Option
Registered Professional Engineer NCEES, Florida, Maryland, Virginia, North Carolina, South Carolina, Georgia and Louisiana.

Mr. Chruszcz has thirty-five years of electrical engineering experience in heavy industrial, electric utilities and commercial electrical engineering design. He is licensed as a PE in seven states including Florida and registered with the NCEES as a PE.

Penn Pro Engineering. Mulberry, Florida. Chief Electrical Engineer. Responsible for detailed electrical design for phosphate mining and processing, petro-chem, and aggregate mines.

- Chief Electrical Engineer responsible for numerous commercial electrical designs including office buildings, multi-family buildings, medical clinics, warehouses, manufacturing for Morgan-Phillips Engineering Group.
- Lead Project Engineer responsible Industrial and utility electrical engineering; and detailed electrical systems design including power systems analysis, load flow and relay coordination and short circuit studies for TEAMWORKnet, Inc.
- Electrical Engineering Department Manager providing Professional Engineering services to the telecomm industry for client companies for KCI Technologies, Inc, Tampa, Florida.
- Chief Electrical Engineer and department head and professional engineer services for large industrial clients such as IMC, Agrico, Cargill, US Agri-Chemicals and RMC Ewell Case Engineering, Inc, Lakeland, Florida.
- Corporate Senior Electrical Engineer responsible for electrical plant modernization and automation projects for eighteen (18) large glass container manufacturing plants for Anchor Glass Container, Tampa, Florida
- Senior Electrical Engineer. Provided electrical design and plant construction management for a 60 MW combined cycle co-generation project and waste water treatment plant expansion. Orlando Utilities Commission, Orlando Florida.
- Power Distribution Engineer and Electrical project engineer in charge of power distribution engineering for WR Grace & Co, Bartow, Florida.
- Chief Electrical Engineer responsible for five (5) electrical project engineers and major expansion for chemical plants and two (2) new mining operations for Four Corners and Hookers Prairie Mines.

Name: Steven R. Moody, P.E.

Title: Structural Engineering Manager

Education: Bachelor of Science in Civil Engineering, University of Florida, Gainesville.
Professional Structural Engineer, Florida, No. 42314, Georgia, No. 25190
P. E. licenses in Georgia, Minnesota and Tennessee.

Mr. Moody has over twenty-four years experience in Structural Engineering and design of facilities for chemical, mineral, citrus and mining industries. His experience includes project management and construction experience.

Representative project assignments include:

- Structural Engineer responsible for gypsum stack closure bridges and pump structures for fresh water and process water transfer.
- Structural Engineer responsible for design of the granulated monoammonium phosphate plant for IMC Phosphate, New Wales, Florida.
- Mechanical and structural design for dry bulk handling systems for gypsum wallboard plants. Locations include National Gypsum at Apollo Beach, Florida, and La Farge at Palatka, Florida.
- Structural Engineer and Project Engineer responsible for the design of hydroslicer system for Cargill Fertilizer, Ft. Meade, Florida.
- Structural Engineer responsible for the design of Lake Hollingsworth dredge project, City of Lakeland, Florida.
- Structural Engineer responsible for the design of Sand Fractionation plant for CSR/Rinker, Davenport, Florida.
- Structural Engineer responsible for the design of pulp extraction system for Tropicana, Ft. Pierce, Florida.
- Structural Engineer responsible for the design of lime rock material handling system for Florida Crushed Stone, Brooksville, Florida.
- Structural Engineer responsible for the design of citrus crushing facility for Tropicana, Bradenton, Florida.

Name: Vincent J. Margiotti, Jr. PE
Title: Process Chemical Engineer
Education: B.S. Ceramic Engineering (Cum Laude), Georgia Institute of Technology
Graduate work at Georgia Tech and the University of Florida
Professional Chemical Engineer, Florida #20534

Mr. Margiotti has over thirty years of diverse technical and managerial experience. A member of the Instrument Society of America, and presented several papers at American Institute of Chemical Engineers' meetings.

Representative assignments include:

- Process Design of grass roots Double Liming Station to treat 1,000 gpm of Fertilizer Plant Acidic Waste Water; design of double lime treatment system to treat 1,500 gpm at existing plant.
- Complete study of existing 2,500 gpm Acidic Water Treatment System to improve throughput, minimize waste removal labor, and determine possible methods of increasing capacity.
- Design of partial treatment system for using high pH acidic pond water in CS ball mill.
- Design of new cooling pond and associated double liming treatment system for existing plant expansion.
- Process design of multiple gypsum pumping systems and other slurry pumping systems for minerals and organics.
- Process development for a patented waste water cleaning machine.
- Project Manager for a clay removal system for a phosphate mine.
- Process Instrument Engineer of record for world's largest single and double train diammonium phosphate plants.
- Environmental designs using process ammonia for scrubbing prior to process use.
- Metropolitan lake restoration with removal of 340,000 tons of organic material.
- Project Manager for a 1 MM TPY sand fractionation plant.
- Rotary cooler design and installation for two fertilizer plants.

Thomas Topp, Liner Group Vice President

Experience Summary

Mr. Thomas Topp

Experience

2001 – Present: Group Vice President, COMANCO

1995 – 2001: Civil Group Project Manager, CEC

1989 – 1995: Project Supervisor

Total Geotextile Installation Quantity: 10,177,350
 Total Geomembrane Installation Quantity: 27,398,702
 Total HDPE Piping Installation Quantity: 351,320
 Total Clay Liner Installation Quantity: 15,200,560
 Totally Composite Installation Quantity: 20,258
 Total Venting Installation Quantity: 10,000

FDEP Required Qualifications	Mr. Thomas Topp's Qualifications
√ Experience in the installation of HDPE smooth and textured liners on phosphogypsum stack systems or other similar type systems	√ Mr. Tommy Topp has more than fourteen years of experience installing HDPE smooth and texture liners. Mr. Topp has Executive level responsibilities and direction for the Civil Group of CEC. His experience includes bidding, negotiating, constructing, management and close out of all projects related to Phosphogypsum stacks for CEC. As one of the first employees of CEC in 1989, Mr. Topp is represents this company at the highest level of expertise.
√ Experience working on projects that involved installing more than 3 million square feet of HDPE Liner.	√ Mr. Topp has managed and supervised projects involving more than 27 million square feet of HDPE liner. His role as Group VP has most recently involved him in the management responsibilities for the Piney Point NGS North Stack Closure consisting of 35 acres of 80 mil HDPE Liner.
√ Experience placing and compacting soil above a liner.	√ Mr. Topp has more than fourteen years experience placing and compacting soil above a liner. He has managed more than 35 projects that involved the placement of various protective soil covers and is very accomplished in managing such operations.
√ Experience with two projects of similar size and scope.	√ Mr. John Doe has worked on the Piney Point site and IMC Phase II Expansion site. These two projects combined the installation of over 15 million sf of 60 and 80 mil HDPE Liner.
√ Experience handling and installing geonet/geotextile composites, geotextiles, concrete erosion control mats, straw erosion mats, and sod.	√ Mr. Topp has equivalent experience handling and installing geonet/geotextile composites, geotextiles, concrete erosion control mats, straw erosion mats, and sod.
√ Licenses	√
√ Education/Training	√
√ Certifications/Affiliations	√

Joe Benz, Liner Project Manager

Experience Summary

Mr. Joe Benz

Total Geotextile Installation Quantity: 10,177,350
 Total Geomembrane Installation Quantity: 27,398,702
 Total HDPE Piping Installation Quantity: 351,320
 Total Clay Liner Installation Quantity: 15,200,560
 Totally Composite Installation Quantity: 20,258
 Total Venting Installation Quantity: 10,000

Experience

2001 – Present: Project Manager, COMANCO Environmental Corporation, Tampa, FL.

FDEP Required Qualifications	Mr. Joe Benz's Qualifications
√ Experience in the installation of HDPE smooth and textured liners on phosphogypsum stack systems or other similar type systems	√ Mr. Joe Benz has four years of experience installing HDPE smooth and texture liners. Mr. Benz has recently managed a project similar that involved installing liners on a phosphogypsum stack system. Mr. Benz is directly involved in all phases of project work including supervision, safety, subcontractor relations, customer relations, administration and completion
√ Experience working on projects that involved installing more than 3 million square feet of HDPE Liner.	√ Mr. Benz has supervised project involving more than 23 million square feet of HDPE liner. His role as Project Manager has most recently involved him in the management responsibilities at the IMC Phase II Expansion project which consisted of 320 acres of 60 mil HDPE Liner.
√ Experience placing and compacting soil above a liner.	√ Mr. Benz has more than four years experience placing and compacting soil above a liner. He has managed more than 20 projects that involved the placement of various protective soil covers and is accomplished in supervising such operations.
√ Experience with two projects of similar size and scope.	√ Mr. Benz has managed the Piney Point NGS North Pond project consisting of 35 Acres of 80 mil liner and the C.F. Industries Area 12 project which consisted of 60 Acres of 60 and 40 mil liner.
√ Experience handling and installing geonet/geotextile composites, geotextiles, concrete erosion control mats, straw erosion mats, and sod.	√ Mr. Benz has equivalent experience handling and installing geonet/geotextile composites, geotextiles, concrete erosion control mats, straw erosion mats, and sod.
√ Licenses	√
√ Education/Training	√
√ Certifications/Affiliations	√

Dragan Milosaljevic, Liner General Superintendent

Experience Summary

Mr. Dragan Milosaljevic

Total Geomembrane Liner Installation Quantity: 23,138,340
Total Geotextile Quantity: 380,000

Experience

2002 – Present: Liner General Superintendent,

COMANCO Environmental Corp., Tampa, FL.

1994 – 2002: Superintendent, COMANCO

FDEP Required Qualifications	Mr. Dragan Milosaljevic's Qualifications
✓ Experience in the installation of HDPE smooth and textured liners on phosphogypsum stack systems or other similar type systems	✓ Mr. Dragan Milosaljevic has more than ten years of experience installing HDPE smooth and texture liners. Mr. Milosaljevic has recently managed a project similar that involved installing liners on a phosphogypsum stack system. His ten plus years of experience include working on and supervising a variety of phosphate construction projects including closures, liner installation, drain installation and excavation.
✓ Experience working on projects that involved installing more than 3 million square feet of HDPE Liner.	✓ Mr. Milosaljevic has supervised projects involving more than 23 million square feet of HDPE liner. His role as General Superintendent has most recently involved him in the supervisory responsibilities at the IMC Phase II Expansion project which consisted of 320 acres of 60 mil HDPE Liner.
✓ Experience placing and compacting soil above a liner.	✓ Mr. Milosaljevic has more than ten years experience placing and compacting soil above a liner. He has managed more than 20 projects that involved the placement of various protective soil covers and is accomplished in supervising such operations.
✓ Experience with two projects of similar size and scope.	✓ Mr. Milosaljevic has worked on the Piney Point NGS North Pond project consisting of 35 Acres of 80 mil liner and the C.F. Industries Area 12 project which consisted of 60 Acres of 60 and 40 mil liner.
✓ Experience handling and installing geonet/geotextile composites, geotextiles, concrete erosion control mats, straw erosion mats, and sod.	✓ Mr. Milosaljevic has equivalent experience handling and installing geonet/geotextile composites, geotextiles, concrete erosion control mats, straw erosion mats, and sod.
✓ Licenses	✓
✓ Education/Training	✓
✓ Certifications/Affiliations	✓

Mr. Todd Kirkman, HDPE and Drain Superintendent

Experience Summary

Mr. Todd Kirkman

Experience

2000 – Present: Superintendent, COMANCO
Environmental Corporation, Tampa, FL.

1997-2000: Foreman, CEC

1992-1997: Field Technician, Liner and Pipe, CEC

Total Geotextile Installation Quantity: 10,577,350
Total Geomembrane Installation Quantity: 37,701,708
Total HDPE Piping Installation Quantity: 442,320
Total Clay Liner Installation Quantity: 15,200,560
Total Composite Installation Quantity: 20,158
Total Venting Installation Quantity: 10,000

FDEP Required Qualifications	Mr. Todd Kirkman's Qualifications
✓ At least 5 years of experience with the installation and fusion welding of HDPE pipe and installation of dewatering drains,	✓ More than twelve years of experience with the installation and fusion welding of HDPE pipe and installation of dewatering drains. Mr. Kirkman has been an employee of CEC for 11 years during which his rolls from Technician to Superintendent have always involved HDPE Pipe and various dewatering applications.
✓ Has successfully completed at least one project on a phosphogypsum stack of similar size and scope.	✓ Mr. Kirkman was the Project Superintendent for the Pipe and Drain portion of a Farmland Hydro, L.P. project in 2000 / 2001. Pipe installation included various sizes from 6" to 24" totaling 12.3 miles of HDPE drain piping installed for a gypsum stack expansion project.
✓ Experience installing corrugated HDPE drainage tubing, HDPE geonets, and field sewing of non-woven geotextiles.	✓ Mr. Kirkman has more than twelve years experience installing corrugated HDPE drainage tubing, HDPE geonets, and field sewing of non-woven geotextiles. As with most drain pipe installations, the practice of geotextile installation and field sewing are common themes which Mr. Kirkman's skills have been time tested.
✓ Experience placing and compacting drain aggregates and soil or gypsum trench backfill.	✓ Mr. Kirkman has been involved with and served as a supervisor for numerous pipe and aggregate drain projects during his twelve year employment with CEC. The protective nature of backfilling and stone placement to avoid collapsing the drain pipe is one area where Mr. Kirkman serves CEC as a field trainer to assist in the education of upcoming Foreman and Superintendents.
✓ Licenses	✓
✓ Education/Training	✓
✓ Certifications/Affiliations	✓

Stuart Taylor, Liner Field Superintendent

Experience Summary

Mr. Stuart Taylor

Experience

2001 – Present: Field Superintendent, COMANCO

Environmental Corporation, Tampa, FL.

1999 – 2001: Liner Forman / Technician, (CEC)

FDEP Required Qualifications	Mr. Taylor's Qualifications
✓ Experience in the installation of HDPE smooth and textured liners on phosphogypsum stack systems or other similar type systems	✓ Mr. Stuart Taylor has more than five years of experience installing HDPE smooth and texture liners. Mr. Taylor has recently worked as Field Supervisor on numerous projects that involve the installation of liners on a phosphogypsum stack system.
✓ Experience working on projects that involved installing more than 3 million square feet of HDPE Liner.	✓ Mr. Taylor has supervised project involving more than 11 million square feet of HDPE liner. His role as Field Supervisor has most recently involved him in a superintendent role at the Piney Pointe NGS and OGS Closure projects which consisted of 70 Acres of 80 mil Liner.
✓ Experience placing and compacting soil above a liner.	✓ Mr. Taylor has more than five years experience placing and compacting soil above a liner. He has worked on more than 10 projects that involved the placement of various protective soil covers and is accomplished in executing such operations.
✓ Experience with two projects of similar size and scope.	✓ Mr. Taylor has worked on the Piney Point NGS and OGS Projects which each consisted of 35 Acres of liner and all related construction disciplines.
✓ Experience handling and installing geonet/geotextile composites, geotextiles, concrete erosion control mats, straw erosion mats, and sod.	✓ Mr. Taylor has equivalent experience handling and installing geonet/geotextile composites, geotextiles, concrete erosion control mats, straw erosion mats, and sod.
✓ Licenses	✓
✓ Education/Training	✓
✓ Certifications/Affiliations	✓

Professional Resume

AL SCHUMAN

President

Experience Summary

As Moretrench Environmental Services, Inc. (MES) president and a member of the firm's Board of Directors, Mr. Schuman maintains executive-level responsibilities and direction of civil construction, industrial infrastructure, groundwater control and treatment, and geotechnical projects throughout the nation. Mr. Schuman also has extensive national experience in civil construction as superintendent and project manager. He has been with Moretrench since 1973.

Mr. Schuman has managed all aspects of MES's Florida based operations since 1982. He has been responsible for the bidding, negotiating, construction, management and close-out of a wide variety of civil and industrial projects for a diverse group of owners including phosphate, utility, food processing, and various manufacturing companies.

Specific project work has included phosphogypsum stack closures, piping and drain systems, relief well systems, construction dewatering, plant maintenance service and repair, wastewater treatment plants, slurry walls, drydocks, subways and tunnels, landfill gas and leachate collection systems, groundwater treatment and remediation systems, hydraulic barriers, pipe-fusing and slip-lining, drilling, grouting, and ground freezing for the purpose of groundwater control.

Education

- A.S., Construction Technology, New Jersey Institute of Technology, 1976
- Associated General Contractors Advanced Management Program 1992
- Associated General Contractors & Florida Construction Industry Licensing Board Continuing Education, ~200 hours

Licenses

State of Florida General Contractor's License - CG-C034173

Phosphate Industry Project Experience

Gypsum Stack Closure – Polk County, FL

As Principal in Charge, completed phosphogypsum stack closure services for an 80 acre gypsum stack in Mulberry Florida. The project involved the dewatering of three cells at the top of the stack, draining and drying the wet gypsum at the top of the stack, preparation of the subgrade for installation of a liner system, installation of 15,000' of toe drains and 2000' of mid level drains, grading of side slopes, excavation and placement of ~550,000 cubic yards of top soil cover including 2' soil cover on the top of stack and 6" of soil cover on the side, placement of grass seed on 60 acres at the top of the stack and on 40 acres of side slopes, grading, placement of 2' of topsoil cover, and seeding of a stormwater collection ditch.

32 Acre Lined Cooling Pond and Closure - Hillsborough County, FL

Directed and provided construction management for a nineteen-month project to excavate and line two active cooling ponds for process water at a phosphate fertilizer plant. During the 21-month project, Moretrench, acting as the general contractor, faced the challenge of managing a continuous flow of process water (in excess of 50,000 gpm) while constructing 32 acres of liner systems, associated piping, diversion structures, and pumping stations. Gypsum with moisture content of up to 50-60% was excavated, dried, and relocated to construct the liner system and berms for the new containment system. Water management provided an additional challenge given heavy volumes of rain and related stormwater runoff during critical stages of the project. Moretrench engineered and constructed several

structures that played integral roles in the completed liner system. Structures included a process water diversion structure activated in October 1999, a bridge across the hot process water channel, and a cold water pump station and platform.

Pressure Relief Well System – White Springs, FL

Directed and engineered the installation of a 5200' pressure relief well system on the perimeter of a phosphogypsum stack at a fertilizer plant facility. 94 relief wells, consisting of double 3-inch wells with 50 foot and 60 foot spacings, were installed to approximately 50 feet below the ground surface and connected to a common 12" PVC header. The header connected the wells to a 36" SDR 11 manifold and a liquid ring vacuum pump system that included a 316 stainless steel pump and 25HP / 460V motor. The system provided an important process water and gypsum stack management tool for the facility.

Gypsum Stack Surge Pond and Intake Structure – Polk County, FL

Directed and managed a nine-month project involving earthwork, dewatering, permanent under drains, synthetic liner, and concrete work for a surge pond located along the western boundary of an active phosphogypsum stack. Moretrench constructed an intake structure at the northern end of the pond to assist the management and movement of stormwater and process water between the pond and the plant.

Gypsum Stack Drains and Outlets Installation – Polk County, FL

Directed and managed the installation of approximately 20,000 LF of HDPE collection pipes, and solid outlet pipes, at a newly constructed gypsum stack at a Polk County fertilizer plant. Slotted collection pipes were enclosed with an envelope of pea gravel, and compacted under 18" of gypsum. The project also included installation of silica gravel collection zones with non-woven filter fabric, and several concrete fabriform outlets pads.

Phosphogypsum Stack Boil Remediation Projects - Central FL

Managed and directed the remediation of numerous boils and piping paths associated with phosphogypsum stacks involving flows ranging from 500-2,000 GPM. The high velocities and movement of fines at the toe of slopes, causing slope instabilities, were remediated through the introduction grouts, additives, and/or aggregates to seal flow paths from the upstream side. Upon reduction of flows voids were grouted and sealed back up under the stacks to eliminate the flow paths.

Professional Affiliations and Memberships

- National Center for Construction Education and Research - NCCER
- Florida Phosphate Committee
- Florida Construction Users Roundtable - FCURT
- Florida Electric Municipal Association - FEMA
- Bay Area Manufacturers Association - BAMA
- First Coast Manufactures Association - FCMA
- Florida Citrus Processors Association - FCPA
- Florida Limerock and Aggregate Association - FLAI
- Association of State Dam Safety Officials - ASDSO
- Association of General Contractors - AGC
- Florida Brownfields Coalition
- Florida Association of Environmental Professionals - FAEP
- Solid Waste Association of North America - SWANA
- Society for American Military Engineers – SAME
- Polyurea Development Association – PDA
- Florida Fruit and Vegetable Association - FFVA
- National Groundwater Association
- National Association of Corrosion Engineers – NACE
- Society for Protective Coatings – SSPC
- Florida Citrus Mutual
- Florida Concrete Products Association - FCPA

Professional Resume

MICHAEL PANNY

Project Manager/Superintendent

Experience Summary

Mr. Panny is Project Manager / Superintendent for Moretrench Environmental Services, Inc. He frequently supervises project activities on several sites concurrently. In his role as project manager / superintendent he is directly involved in all phases of project work on jobsites including site supervision, safety, budget control, coordination with vendors, subcontractor relations, client relations, project estimates, project administration, and timely completion of each project.

During his 19 years with Moretrench, Mr. Panny has acted as field lead for a variety of construction projects including phosphogypsum stack closures, toe drain installations, relief well systems, grouting, boil remediation, gypsum stack maintenance, geotechnical drilling, plant service and maintenance work, and groundwater control.

Education

Mr. Panny is a high school graduate and regularly participates in continuing education courses.

AGC Advanced Management Course, 1992

Phosphate Industry Project Experience

Mr. Panny has acted as project manager / superintendent for a large number of construction projects in the phosphate industry. A partial listing follows below.

Cargill Mulberry North Stack Closure – Mulberry, FL

Supervised phosphogypsum stack closure services for an 80 acre gypsum stack in Mulberry Florida. The project involved the dewatering of three cells at the top of the stack, draining and drying the wet gypsum at the top of the stack, preparation of the subgrade for installation of a liner system, installation of 15,000' of toe drains and 2000' of mid level drains, grading of side slopes, excavation and placement of ~550,000 cubic yards of top soil cover including 2' soil cover on the top of stack and 6" of soil cover on the side, placement of grass seed on 60 acres at the top of the stack and on 40 acres of side slopes, grading, placement of 2' of topsoil cover, and seeding of a stormwater collection ditch.

Holding Pond Excavation and Drain Work, IMC - Fort Meade, FL

Supervised excavation services for the construction of a new, 25-acre holding pond. Approximately 75,000 cubic yards of gypsum fill was drained and excavated from the middle of the existing basin. On and offsite gypsum fill material was placed and compacted to complete the construction of pond and the surrounding dikes.

32 Acre Pond Project, Cargill Fertilizer - Riverview, FL

Supervised a nineteen-month project to excavate and line two active cooling ponds for process water at a phosphate fertilizer plant. During the 21-month project, Moretrench, acting as the

) general contractor, faced the challenge of managing a continuous flow of process water (in excess of 50,000 gpm) while constructing 32 acres of liner systems, associated piping, diversion structures, and pumping stations. Gypsum with moisture content of up to 50-60% was excavated, dried, and relocated to construct the liner system and berms for the new containment system. Water management provided an additional challenge given heavy volumes of rain and related stormwater runoff during critical stages of the project. Moretrench engineered and constructed several structures that played integral roles in the completed liner system. Structures included a process water diversion structure activated in October 1999, a bridge across the hot process water channel, and a cold water pump station and platform.

PSC Phosphates Pressure Relief Well System – White Springs, FL

Directed and engineered the installation of a 5200' pressure relief well system on the perimeter of a phosphogypsum stack at a fertilizer plant facility. 94 relief wells, consisting of double 3-inch wells with 50 foot and 60 foot spacings, were installed to approximately 50 feet below the ground surface and connected to a common 12" PVC header. The header connected the wells to a 36" SDR 11 manifold and a liquid ring vacuum pump system that included a 316 stainless steel pump and 25HP / 460V motor. The system provided an important process water and gypsum stack management tool for the facility.

Phase 1A and 1B, Cargill Fertilizer - Bartow, FL

) Supervised the installation of approximately 20,000 LF of HDPE collection pipes, and solid outlet pipes, at a newly constructed gypsum stack at a Polk County fertilizer plant. Slotted collection pipes were enclosed with an envelope of pea gravel, and compacted under 18" of gypsum. The project also included installation of silica gravel collection zones with non-woven filter fabric, and several concrete fabriform outlets pads.

Health & Safety

Phosphate Council Safety Training
MSHA Mine Safety Training
OSHA 40-hour Health & Safety Training
OSHA 8-hour Annual Updates
OSHA Supervisory Training
OSHA Confined Space Entry
OSHA Competent Persons in Excavations
Red Cross First Aid & CPR

Professional Resume

PAUL DAVIS

Superintendent

Experience Summary

Mr. Davis is a Superintendent for Moretrench Environmental Services, Inc. He has worked as a Moretrench superintendent for over 1 year, and previously worked as superintendent for McDonald Company for the last 5 years of his 9 years of employment.

Mr. Davis has over 10 years experience working on and supervising a variety phosphate construction projects including excavation and grading work, stack closures, drain installations, liner installations, liming operations, and gypsum stack maintenance.

Education

Mr. Davis is a high school graduate from Mulberry Florida.

Phosphate Industry Project Experience

Mr. Davis acted as superintendent for a variety of construction projects in the phosphate industry. A partial listing follows below.

Cargill North Stack Closure and Side Slopes Grading - Bartow, FL

Cargill Mulberry Liming Operations – Mulberry, FL

Cargill Green Bay Stack Maintenance – Mulberry, FL

Farmland Gypsum Stack Construction – Mulberry, FL

Cargill Bartow Lining of South Stack Cell – Bartow, FL

Cargill Mulberry Raising of South Stack – Mulberry, FL

Health & Safety

Phosphate Council Safety Training

MSHA Mine Safety Training

OSHA 40-hour Health & Safety Training

OSHA Confined Space Entry

OSHA Trench and Excavation Safety

Osha Welding and Cutting Safety

NCCER Mobile Equipment Training

Red Cross First Aid & CPR