

## **CHARLES P. “FROSTY” FORSTER, P.E., P.G.**

### **Education:**

Master of Science in Interdisciplinary Engineering, Texas A&M University, 1981  
Bachelor of Science in Geology, Sul Ross State University – 1976

### **Registration:**

Professional Engineer, Texas No. 59043; Arizona No. 21321;  
New Mexico No. 19579  
Professional Geologist, Texas No. 104; North Carolina No. 0872

### **Certification:**

Certified Professional in Erosion and Sediment Control (CPESC) No. 5368  
Certified Erosion, Sediment and Storm Water Inspector (CESSWI) No. 0694  
TCEQ LPST Corrective Action Project Manager No. CAPM01288  
Storm Water Construction Inspector (SAWS)  
OSHA 40 Hour HAZWOPR  
MSHA Surface Mining Certificate (lapsed)  
Asbestos Inspector No. 458112106.025 (lapsed)  
Individual Asbestos Management Planner No. 205428 (lapsed)

**Language:** Conversant in Spanish with modest reading skills

### **Experience:**

Mr. Forster has more than 32 years of international and domestic experience. He has held positions such as Exploration Geologist, Assistant Mine Geologist, Mine Geologist, Senior Mining Engineer, Staff Mining Engineer, Staff Hydrologist, Staff Geotechnical Engineer, Director of Engineering and Geologic Services, Applied Science Manager, Senior Project Manager, Vice President Surveying, and Vice President Environmental. His current position is Principal and his responsibilities include management and technical oversight of the firm's engineering and environmental services.

### **Work History:**

June 1976 – August 1976 – Wyoming Minerals Corporation - Marfa, Texas

- Exploration Geologist

January 1977 - May 1981 - Conoco – Falls City, Texas

- Assistant Mine Geologist
- Mine Geologist

June 1981 – June 1997 – Morrison Knudsen Corporation – San Antonio, Texas

- Senior Mining Engineer
- Staff Mining Engineer
- Staff Hydrologist
- Staff Geotechnical Engineer
- Director of Engineering and Geologic Services
- Applied Science Manager

June 1997 – February 2010 – Pape-Dawson Engineers, Inc. – San Antonio, Texas

- Senior Project Manager
- Vice President Surveying
- Vice President Environmental

March 2010 – Present – Forster Engineering – San Antonio, Texas

- Principal

## **Project Experience:**

### Edwards Aquifer Protection Plans

Prepared or directly supervised in excess of 100 Edwards Aquifer Plans for submittal to the Texas Commission on Environmental Quality (TCEQ) for land development or other regulated activities over the recharge zone or contributing zone in accordance with 30 TAC Chapter 213. These plans include permits for Water Pollution Abatement Plans (WPAP), Contributing Zone Plans (CZP), Sewer Collection System Plans (SCS), and sensitive feature mitigation or sealing plans.

### Clean Water Act, Section 404

Prepared or directly supervised the preparation of Nationwide Permits or Pre-Construction Notifications (PCN) in compliance with United States Army Corps of Engineers (USACOE) requirements. Additionally, he has conducted or supervised determination of jurisdictional waters and wetland identifications.

### Phase I Environmental Site Assessments

Prepared or directly supervised over 170 Phase I ESAs in general accordance with ASTM E1527 (August 2009).

### Texas Pollutant Discharge Elimination System (TPDES)

Prepared or directly supervised over 175 Storm Water Pollution Prevention Plans (SW3P) for construction projects to comply with the March 5, 2008, TPDES permit requirements (August 2009).

### National Pollutant Discharge Elimination System (NPDES)

Prepared or directly supervised over 300 SW3P for construction projects to comply with the July 6, 1998, NPDES permit requirements.

### Spill Prevention Control and Countermeasures Plan (SPCC)

Prepared or directly supervised the preparation of SPCC plans for several industrial clients.

### Edwards Aquifer Spill Prevention and Recovery Plan (SPRP)

Prepared or directly supervised the preparation of SPR plans for several commercial clients.

### Texas Department of Transportation

Directed crews in collecting and interpreting environmental data for Phase I, II and III environmental assessments, waste management, and construction project observation. Prepared environmental site assessment of proposed right-of-way.

### Schools - NEISD

NEISD Proposed Bulverde Road at Roseheart Elementary School, Bexar County, TX - Responsible for a Phase I Environmental Site Assessment, karst feature evaluation, and a geologic assessment of the property.

NEISD Tuscan Heights Elementary School, San Antonio, TX

Responsible for a geologic features evaluation of the school site as part of a WPAP submittal to the TCEQ.

NEISD Bulverde Green Elementary School, San Antonio, TX

Responsible for a geologic features evaluation of the school site as part of a WPAP submittal to the TCEQ. Prepared numerous sensitive geologic feature closure plans.

### International Truck Route, City of Eagle Pass, Texas

Prepared NEPA environmental assessment of proposed designated truck route alignment from new international bridge to connection with existing FM 1021 for submittal to TXDOT and FHA.

### Alamo Cement

Performed Phase I, II and III Environmental Assessments, waste management regulatory option

evaluations, and hydrologic studies. Prepared a groundwater dewatering design for a Class I Industrial Waste Landfill and supervised its installation. In addition, supervised long term groundwater monitoring and regulatory reporting at this site. Supervised engineering design of railroad car bottom-dump hopper and conveyor load-out for fuel deliveries.

#### Eagle Pass Water Works

Developed water conservation plan and drought management plan which was reviewed and approved by the TNRCC (now TCEQ).

#### Martin Marietta Materials

Coordinated engineering services for mine planning, surveying, and permitting. Managed and directed engineering services for major quarry expansion, three quarry acquisitions, four railroad spur designs or feasibility evaluations, prepared WPAP for new quarry operation over the Edwards Recharge Zone, and provided SWP3 inspections.

#### Vulcan Materials

Coordinated and directed engineering services for double loop industrial rail spur with total trackage in excess of 3 miles.

#### San Miguel Electric Cooperative

Supervised and conducted groundwater data collection for the San Miguel Lignite Mine SMLM III and SMLM IV Permits. These efforts included installation of water wells and piezometer wells, conducting pumping tests, collecting water samples for chemical analysis, interpreting and analyzing data and performing groundwater modeling utilizing MODFLOW. Oversaw and managed the design and permitting (Railroad Commission of Texas, Surface Mining Regulation, Section 146, Probable Hydrologic Consequences) of a dewatering/depressurization system, which included a re-injection well system for saline groundwater.

#### Texas Municipal Power Agency

Supervised and conducted groundwater data collection for the Gibbons Creek Lignite Mine Permits 26C, 38A, 38B and 38C. This effort included installation of water wells and piezometer wells, conducting pumping tests, collecting water samples for chemical analysis, data interpretation and analysis and groundwater modeling utilizing MODFLOW. Oversaw and managed the design and permitting (Railroad Commission of Texas, Surface Mining Regulation, Section 146, Probable Hydrologic Consequence) of a dewatering/depressurization system which would allow mining to be conducted under safe conditions.

#### Carbones del Guasare, Socuy Coal Mine, Maricaibo Venezuela

Project Manager responsible for all aspects of mine planning, equipment selection, groundwater evaluation, site geology, geotechnical evaluation, site facilities infrastructure, personnel requirements, and economic feasibility study. This effort was funded in part by the U.S. Trade and Development Agency.

#### Mibrag, Germany

Performed the due diligence on all groundwater operations for the privatization of a former East German, government-owned lignite mining operation. Annual groundwater pumpage at the mines covered under the due diligence was in the range of 22 billion gallons. Evaluated the existing operations and provided specific recommendations for revisions to drilling procedures and well construction design.

#### LOY YANG Lignite Mine, Melbourne Australia

Performed the due diligence on all groundwater and slope stability operations for the privatization of the Australian LOY YANG Lignite Mine. Evaluated the existing operations and provided specific recommendations for revisions to drilling and well construction procedures, which would reduce cost by a minimum of 25 percent.

#### Conquista Project

Designed, organized and conducted aquifer pumping tests for a large uranium mining operation

near Falls City, Texas. Used pumping test results to satisfy regulatory permitting requirements and also to design dewatering/depressurization systems. Supervised the drilling and well construction contractors for both test wells and dewatering system wells.

Grupo Internacional Coahuila S.A. de C.V. Coahuila, Tamaulipas, and Nuevo Leon, Mexico

As Director of Engineering and Geologic Services, performed the acquisition, technical development, and marketing of coal concession in these Mexican states. Efforts succeeded in securing the two largest major coal concessions (combined total area of 128,000 acres) held by a non-Mexican company.

### **Membership and Organizations:**

- Member and Past President, Texas Society of Professional Engineers, Bexar Chapter
- Member, South Texas Geological Society
- North San Antonio Chamber of Commerce – Board Member and Governmental Affairs Committee Member
- Professional Engineers in Private Practice – Board Member and Director of Geotechnical and Environmental Affairs
- US 281 Environmental Impact Study – Citizens Advisory Committee
- Southern Edwards Plateau, Habitat Conservation Plan – Citizens Advisory Committee
- The Nature Conservancy – Member
- World Wildlife Federation – Member
- Ducks Unlimited – Member
- Defenders of Wildlife – Member
- Sierra Club – Member
- Catholic Relief Services – Member
- Mercy Corps International - Member

### **Publications:**

- “Geotechnical Studies Related to In-Situ Lignite Gasification Trials”, J.E. Russell, E.R. Hoskins, D. Becker, C.P. Forster and Y.J. Wang, TAMRF Project Number: 4365, Texas A&M University, College Station, Texas. December 1985.