

# Pipeline Project Management – Practices & Procedures

## Overview Training for Engineers and Managers



**Why:** The demand for pipeline engineers and operating managers worldwide far exceeds the supply of available trained and experienced personnel. This demand is expected to increase as new systems are planned and existing facilities expand along with changes in industry codes and construction practices.

The three segment course addresses the activities requiring management in conceiving, defining, budgeting, planning, and delivering the elements of a completed pipeline system or component project. The completed elements range from the constructed physical features to records of performance, costs, and compliance with the requirements set by the project owner and involved public entities.

Not including construction, upwards to twenty or more categories of activities may be in progress between conception and completion of a project to modify an existing pipeline facility, or to create a new integrated system. The course is designed for engineers and managers who would benefit from comprehension of the work and management involved in each activity and their interdependencies.

The series of courses will introduce you to these challenges and how they affect both the design and operation of your pipelines. After completing this series of courses you will have an understanding of the procedures and practices required in managing a pipeline project from start to finish.

**Where:** Technical Toolboxes, Inc. offices located at 3801 Kirby Drive, 5th Floor, Houston, TX 77098. (map to be provided)

**Duration:** The three days of classes will be scheduled in successive days for Subjects 1 & 2, and again in successive days for Subjects 2 & 3. Attendees may choose any one day of the curriculum or combination of days. All sessions in Houston start at 8:15 AM.

**Price:** \$400 per student per sessions, \$700 for two sessions, \$1000 for all three sessions

**Instructor:** Wayne Wildenradt, BSCE, Purdue University; MBA University of Wisconsin ; Texas Professional Engineer #33030, Texas Registration

to offer and perform engineering services #F-2773. Forty- eight (48) years global experience in the design, engineering and project management services for oil, gas and refined product systems and components. In addition, Mr. Wildenradt was an Instructor, Economics of Pipeline Transportation at the University of Texas School of Pipeline Technology.

### Course Agenda/Outline

#### Session 1

**Start: 8:15AM**

#### MANAGING THE PROJECT CONCEPTION

1. INTRODUCTION
2. WHAT IS NOTABLE ABOUT A PIPELINE PROJECT
3. A COMMITMENT BASED ON A REPORT
4. STEPS IN MAKING THE REPORT
5. MANAGING THE STEPS
  - ⇒ Pre-steps
  - ⇒ Understanding the reason for the project
  - ⇒ Establishing the criteria for the design
  - ⇒ Identifying feasible design options
  - ⇒ Researching what is needed
  - ⇒ Describing the major features
  - ⇒ Estimating the investment costs
  - ⇒ Estimating annual expenses
  - ⇒ Forecasting risk & return on the investment
  - ⇒ Developing a project time frame
  - ⇒ Drafting, editing and presenting the report
  - ⇒ Staying current on preparation charges
6. EXERCISES IN EVALUATING RISK AND POTENTIAL PROFITABILITY
7. ANOTHER LOOK AT 36 TO 49 YEAR OLD PROJECTS DURING CONSTRUCTION AND YEAR 2007

#### Session 2

#### MANAGING THE BASIC DESIGN AND OTHER EARLY PROJECT DELIVERABLES

1. INTRODUCTION
2. OWNERS PERSPECTIVE AND INVOLVEMENT
3. THE EARLY PROJECT DELIVERABLES
4. PRINCIPLE AND SUPPORT PERSONNEL
5. ESTABLISHING THE BASIC DESIGN
  - For Systems, Lines, Stations, Terminals, Controls
6. PREPARING THE BUDGET

- ⇒ Practices and Difficulties
- ⇒ Owner Overhead Costs
- ⇒ Direct Costs
- ⇒ Indirect Costs and Contingency
- 7. PREPARING THE DETAILED SCHEDULE
- 8. OBTAINING PUBLIC AUTHORIZATION
- 9. PROCEDURES FOR APPROVALS
- 10. FORMING EXECUTION PLANS
  - ⇒ Factors and Risks That Will Shape the Plans
  - ⇒ Activities to be Planned and Potential Participants
    - Management, Accounting and Administration
    - Obtaining Land, ROW and Permits
  - Engineering:
    - Surveys and site investigations
    - Detailed design
    - Procurement of Equipment, Materials & Services
    - Preparations for construction
    - Field Office
    - Receiving equipment and materials
    - Overseeing and Supporting Construction
    - Training, commissioning and start-up
    - Assuring Quality and Compliance
    - Project ending
  - ⇒ Budgeting the Plan
- 11. CASH FLOW FORECASTS and RECAP

### Session 3

#### MANAGING THE REMAINING DELIVERABLES UNTIL COMPLETION OF THE PROJECT

1. INTRODUCTION TO THE REMAINING STAGES AND PROJECT ENDING DELIVERABLES
2. MANAGING THE DOCUMENTS THAT MAKE UP THE ENDING DELIVERABLES
3. DOCUMENTS BY ACTIVITY OF THE REMAINING STAGES
  - ⇒ Management, Accounting and Administration
    - Obtaining Land, ROW and Permits
  - ⇒ Engineering:
    - Surveys and site investigations
    - Initial detailed design
    - Preparations for construction
    - Assembling operating & maintenance manuals
  - ⇒ Procurement of Equipment, Materials and Services
  - ⇒ Field Operations
    - Field office administration
    - Receiving equipment and materials
    - Field engineering
    - Construction inspection
    - ROW and Permit Releases

- ⇒ Commissioning and start-up
  - ⇒ Training
  - ⇒ Assuring Quality and Compliance
  - ⇒ Project Ending Activities
4. REVIEW



**Please complete the attached form and fax to TTI at 713-630-0560**

**Course Cost: \$400.00 per student per session, \$700.00 for two sessions, \$1000 for all 3 sessions**

**Course Date: Session 1 - January 5th, 2010  
Session 2 - January 6th, 2010  
Session 3 - January 7th, 2010**

**Name** \_\_\_\_\_

**Company** \_\_\_\_\_

**Address** \_\_\_\_\_

**Address** \_\_\_\_\_

**City, State, ZIP** \_\_\_\_\_

**Country** \_\_\_\_\_

**Phone/Mobile** \_\_\_\_\_

**Fax** \_\_\_\_\_

**E-mail** \_\_\_\_\_

**Payment by Credit Card**

**Circle One: VISA MasterCard AMEX**

**CC Number** \_\_\_\_\_

**Expiration Date** \_\_\_\_\_

**Signature\*** \_\_\_\_\_

**\* By signing above I commit to paying the course fee when invoiced**

**Terms and conditions:** One registration is required per person. Upon receipt of your above registration, an invoice will be generated for Payment. Payment is due 30 days from receipt of invoice.