



## About The MTS™ Citgo Project

### Description of the Project

The Citgo Refinery in Lemont, IL needed to reduce the CO, NO<sub>x</sub>, SO<sub>x</sub> and catalyst fines in their FCC Flue Gas. This required them to revise the FCC Flue Gas train to meet the new standards and provide training for the operators on the changes.

Based on 26 years of previous successful partnering in operations training, *MTS World, Inc.* (*MTS*.) participated in the design and installation of an Operations Training Program.

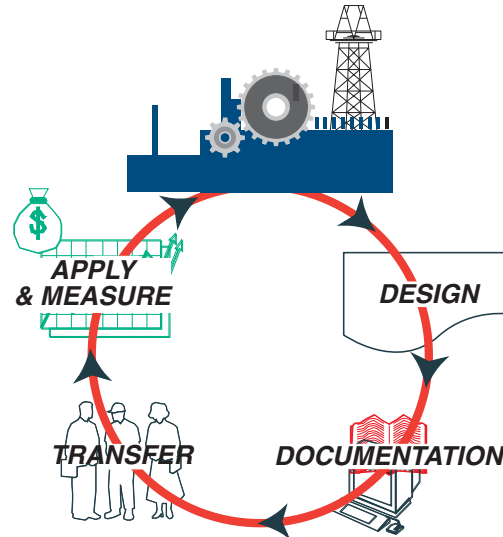
**Stage 1 Design:** The Process Descriptions and P&IDs were reviewed to divide the process into 9 Process Step and 2 Instrument Systems manuals. A project implementation plan was developed that coordinated with the construction and startup timeline.

**Stage 2 Documentation:** *MTS* wrote the required training manuals which were then reviewed for technical content by Citgo process engineers. The drafted/reviewed manuals were converted into final documents by *MTS* using its *DOC* Software and delivered as native files and Adobe Acrobat pdf files.

**Stage 3 Transfer:** Citgo supervisors were trained to train the operators using the new manuals. They were also trained on how to use the *DOC* Software to update and revise the manuals as needed due to construction changes.

**Stage 4 Apply & Measure:** The Learner Objectives and Feedback sections of the manuals were used by the Supervisors to measure the results of the training and the qualifications of the operators.

The *MTS* System as a whole is represented as follows.



#### 1. The Design Phase includes:

- ◆ Analysis of Technology-Organization-People
- ◆ Process Maps
- ◆ Competency Maps
- ◆ Program Design
- ◆ Implementation Plan Development

#### 2. The Documentation Phase includes:

- ◆ Developing process and equipment manuals
- ◆ Training Writers (Write-To-Learn™ strategy)
- ◆ Electronic conversion of documents
- ◆ Modules from the *MTS* Library

#### 3. The Transfer Phase includes:

- ◆ Learning-How-To-Learn™
- ◆ Training Facilitators
- ◆ Gap Assessment
- ◆ Training Vs. Gap

#### 4. The Apply & Measure Phase includes:

- ◆ Training Measurement
- ◆ Business Impact Measurement
- ◆ Audits
- ◆ Certification
- ◆ Integration of Initiatives
- ◆ Sustainment and Optimization