

## **A GIS based Pipeline Information System for BPCL**

### 1) Problem/Objective

BPCL (Bharat Petroleum Corporation Limited) is a leading public sector organization engaged in exploration and marketing of petroleum products. It is ranked amongst the top companies in the world. Bharat Petroleum produces a diverse range of products, from petrochemicals and solvents to aircraft fuel and specialty lubricants and markets them through its wide network of Petrol Stations, Kerosene Dealers, LPG Distributors, Lube Shoppe, besides supplying fuel directly to hundreds of industries, and several international and domestic airlines. BPLC has a large network of pipeline for transporting petroleum products. Pipeline is one of the fastest and most convenient ways of transporting petroleum products. However the pipelines are costly and require monitoring and as they carry hazardous and combustible material. BPCL wanted a solution to monitor the pipelines.

### 2) ADCC's approach

ADCC offered a solution to maintain and monitor the pipeline carrying the combustible and hazardous petroleum products. ADCC developed a solution to monitor the entire stretch of pipeline from Manmad to Mumbai. The solution used existing SCADA system for the engineering details and interfaced it with a GIS based system by mapping the entire pipeline. The new system was now capable of monitoring the engineering details, the administrative details, and the safety features through a map interface.

- Digitized base map of the entire region in and around the pipeline
- Superimposition of road network
- Superimposition of administrative details
- Integrated pipeline/utility/asset management.
- Intelligent analysis on map for emergency redressal
- Complements safety measures / decision support system.

### 3) Technologies used

The solution for BPCL was developed using ASP.NET, SQL Server 2000, and Tatuk IS.

### 4) Client Comments

"This is really a must for Petroleum companies who own pipelines. It makes job of maintaining the pipeline much easy" -Mr. N. Manohar Rao, Chief Manager (OPS) BPCL

### 5) Why ADCC

#### a. Expertise

Excellent Resource Pool of professionals with average 4 years experience



and rich domain knowledge across various industry verticals. 100 man-years of experience working on different software projects.

b. Infrastructure

State-of the-art, Scalable Infrastructure with 6 Servers, 75 Client Nodes

c. Delivery Model

A delivery model for 365x24 services levels tailored to client needs for offshore, onsite or virtual onsite service delivery.