

SUCCESS STORY

Material Movement System for Chevron Texaco, Singapore - Sakra Island Project

The Challenge:

When Chevron set up its petrochemical plant in Sakra Island plant 1999, they needed to quickly build a Material Management System that would take their special needs into account. The system was required to be able to track inventory levels and loading and unloading of materials to/from vehicles and warehouse.

MMS – Overview:

The system comprise of 3 functions, namely:

Tank Gauge Calculation

The system is required to calculate the mass of products in different tanks in metric tons and the cubic meter size upon application of a formula based on input parameters entered by the user.

Plant Inventory System

The system essentially enables the user to capture issues and receipts of materials moving to/for the warehouse. It is able to keep track of inventory for liquid and solid materials. Liquid materials are packed in Bulk or ISO/Drum whereas solid materials are packed in bags.

Material Loading / Discharge Control

Materials can be loaded / unloaded from trucks, loaded on ship, filled into drums. Theuser enters all outstanding transactions into a control record list. The transactions are then transferred into a loading/unloading schedule record for each day. To avoid contamination from re-use of the same pipeline, truck or drum, a record of the last materialused on that pipeline, truck, drum is also reflected. The record helps the user prepare loading/unloading instructions for the material that needs to be moved for that day's schedule.



Services Completed

The system was delivered in two phases, Phase 1 comprising of Tank Gauging and Inventory Management and Phase 2 for the Material Control module.

NetReach undertook all services from concept to implementation and support i.e. System Analysis, Functional Specifications, Database Design, Programming, Acceptance Testing, Training and Implementation.

Technologies Used

The application was developed using Powerbuilder 7.0 as the front-end and Oracle 8i asthe back-end engine.

Benefits

- Customised to Chevron's specific requirements
- Ensure efficient inventory management
- Reduction of manual errors and increase of operational efficiency

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