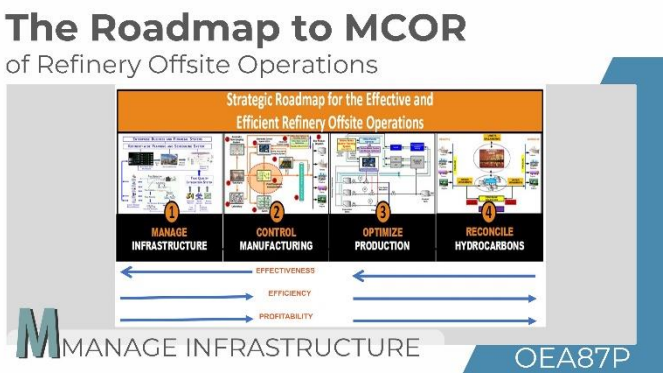

Topic ID	**OEA87T**
Title	**The Roadmap to MCOR of Refinery Offsite Operations**
Category	**M-Manage Infrastructure**
eLearning Level	**Basic**

Introduction

Onsite and offsite are two distinct categories of refinery operations. Undoubtedly, offsite operations consist of 80 to 90 percent of the refinery's end products and, therefore, affect the refinery's bottom line regarding efficiency, accountability, minimization of quality giveaways, and accuracy.

This topic will discuss refinery onsite versus offsite operations, MCOR of refinery operations, the effect of MCOR on the bottom line, downstream refining challenges, benefits of automation of offsite operations, steps for efficient and effective operations

The topic also discusses benefits from Improved business operations, benchmarking assessment of blending operations, mapped OMS services with refining opportunities, etc.

Onsite Versus Offsite Operations

Onsite operations include processes that produce intermediate products. In other words, products that are not sold directly to the customers are produced in onsite operations. On the other hand, offsite operations generate the final products, such as gasoline, diesel. As said previously, most of the refinery operations are conducted in offsite processes. For example, crude receipt and storage, process unit feed, process unit rundowns, intermediate product storage, component storage, fuel blending, storage of final products, and dispatch and loading of final products.

MCOR of Refinery Operations and Its Effect on Bottom-Line

There are four principal activities of offsite refinery operations. They are managing infrastructure, controlling manufacturing, optimizing production, and reconciling hydrocarbons. There are hundreds of tank farms, pipelines, field equipment, control systems in a refinery infrastructure. This infrastructure must not only be sufficient but also utilized effectively to increase production and controllability.

There are many challenges concerning the management of field infrastructure. For example, management of an excessive number of field equipment, manually operated equipment, regular calibration/maintenance, and insufficient equipment.

There are many significant benefits of automating offsite operations in a refinery. For example, optimized blend recipes reduce the overall blend cost, reduction in blend correction, increases oil production and profitability of the plant, scheduling automation of oil movements

Additionally, real-time monitoring of inventory, increasing operator efficiency, diminishing the contamination of products, enhancing the safety and security of workers and the refinery environment, etc.

Summary

It is better to follow the 'Divide and Rule" principle to manage refinery operations efficiently and profitably. Therefore, we have discussed four management aspects: manage, control, optimize, and reconcile the refining operations. Steps and precautions followed for each of these operation phases will make them efficient and profitable.

Options for eLearning this topic

Mode of eLearning	Available?
Free Course	No
Refresher Course	Yes
Pick N Choose (Custom Curriculum)	Yes
Advanced Level Course	Yes
Structured MCOR Curriculum	Yes