

# Impact of EOR on Water Management



## Description:

This program will address the challenges that facility engineers and operators will face in preparation for an EOR project. The Total System Analysis (TSA) methodology will help to identify the main issues and the procedures to mitigate the operational risk. Topics will include: chemical interactions (EOR and production chemistries), EOR chemicals preparation, impact of back-produced EOR chemicals on surface facilities, on-site expertise and a Water Management Strategy.



## Application:

Water Management for Chemical EOR, Thermal EOR and Gas Injection.



## Results:

A comprehensive workflow to evaluate and solve water management issues at EOR sites using a disciplined project methodology and water management strategy.

## Challenges:

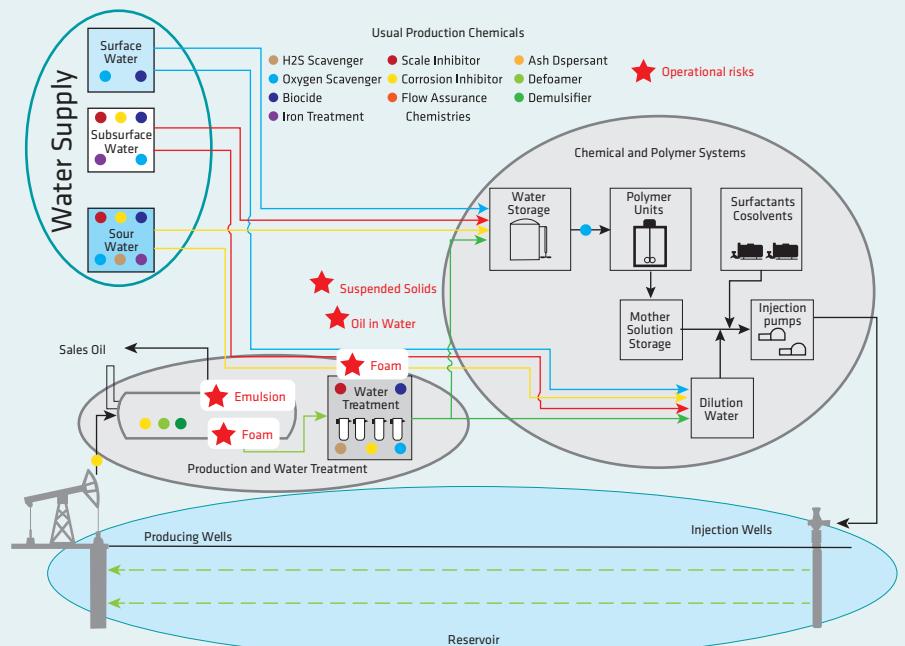
- Impact of treatment additives on chemical EOR performance.
- Impact of EOR chemicals on oil/water separation and water treatment.
- Impact of EOR chemicals on well production issues (corrosion, microbial activity, etc.).
- Impact of using produced water for chemical EOR.

## Solutions:

- To investigate the impact of chemical EOR on the production system as a whole.

## Objectives:

- Assess the impact of EOR on the overall produced water cycle.
- Identify key issues of specific project and the best way to address them.



Source: SPE174537, Dwyer et al, 2015

References: SPE164098, SPE169067, SPE174537, SPE190438, SPE 192110 (E. Delamaide), SPE 194979