Reasons for formation of stable intermediate layer water-in-oil emulsions in tanks
The first reason for which the intermediate layer emulsion formation occurs in the production site tanks is the mixture of oils from different oil-bearing horizons.

The second reason is the mechanical impurities presence in oil emulsions.

The third reason providing high stability of intermediate layers is caused by presence of refractory paraffin hydrocarbons with melting point up to +85 °C.
The fourth reason is oilfield chemistry reagents.

The fifth reason is long-term oil production technological chain according to the integrated well-to-settling tank approach and application of intensive hydrodynamic well production modes, dispersion in metering and pumping installations.
As a result of analysis of reasons for formation of stable intermediate layer water-in-oil emulsions in tanks, it can be concluded that due to its multi-factor character the problem of formation of intermediate layer emulsion can be solved to a greater extent only at the final stage of oil preparation and transportation, namely, at the stage of oil settling in tanks which will consequently reduce the total volume of disposed oil sludge at the water treatment plant.