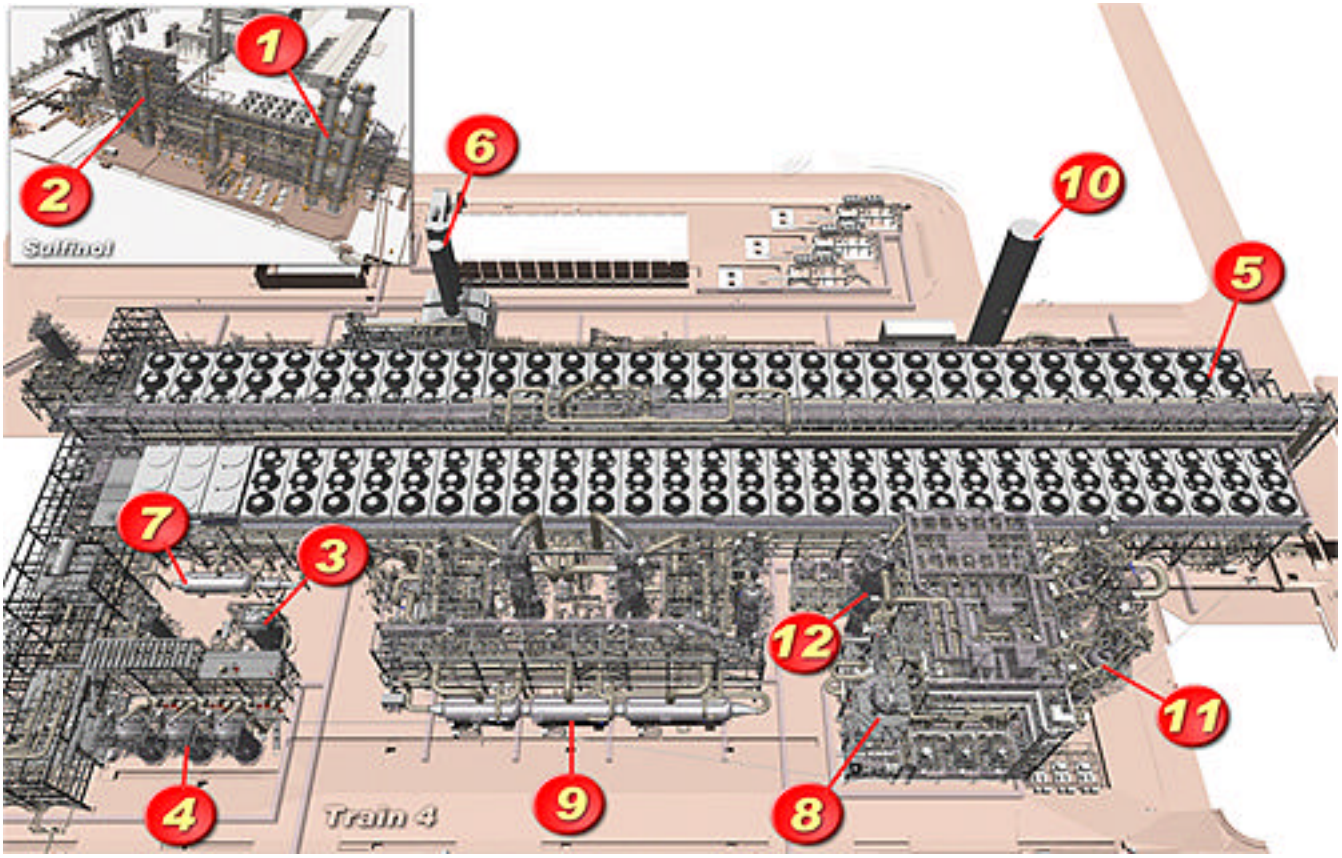

The LNG Process

1. ***Sulfinol absorber columns***. Raw gas enters the column where it mixes with a solvent (Sulfinol) that removes CO_2 from the gas
2. ***Sulfinol regeneration***: Solvent from the Sulfinol absorber is stripped of CO_2 for re-use in the absorber column
3. ***Mercury removal unit:*** Any mercury in the gas is removed to protect the main cryogenic heat exchanger which is made of aluminium
4. ***Gas dehydration units***: Gas leaving the Sulfinol unit has saturated water removed and cooled to 21^0C.
5. ***Air-fin coolers***: The banks of coolers provide cooling for the propane refrigerant cycle and some cooling for the mixed refrigerant cycle
6. ***Exhaust stacks for gas turbine compressors:*** These are for the propane and mixed refrigerant compressors
7. ***Refrigerant (propane) heat exchangers***: Propane chills the gas to -35^0C before entering the main cryogenic heat exchanger
8. ***Scrub column:*** Heavy components of the gas (pentanes and heavier) are removed to produce ethane and propane for the refrigerant cycles
9. ***Mixed refrigerant heat exchanger:*** Refrigerant is cooled to -35^0C before its use in the main cryogenic heat exchanger
10. ***Exhaust stacks for mixed refrigerant compressors:*** These are for the mixed refrigerant compressors
11. ***Main cryogenic heat exchangers:*** The “heart” of the liquefaction process where gas is cooled again mixed refrigerant to minus 138^0C and becomes liquid
12. ***High and low pressure LNG flash vessels:*** Final cooling achieved by expanding liquefied gas to close to atmospheric pressure. As the liquid expands it cools to -161^0C, ready for piping to the LNG storage tanks