World Academy of Science, Engineering and Technology
International Journal of Energy and Environmental Engineering
Vol:9, No:06, 2015

Liquid Sulphur Storage Tank

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Abstract : In this paper corrosion in the liquid sulphur storage tank at South pars gas complex phases 2&3 is presented. This full hot insulated field-erected storage tanks are used for the temporary storage of 1800m3 of molten sulphur. Sever corrosion inside the tank roof was observed during over haul inspections, in the direction of roof gradient. Investigation shown, in spite of other parts of tank there was no insulation around these manholes. Internal steam coils do not maintain a sufficiently high tank roof temperature in the vapor space. Sulphur and formation of liquid water at cool metal surface, this combination leads to the formation of iron sulfide. By employing a distributed external heating system, the temperatures of any point of the tank roof should be based on ambient dew point and the liquid storage solidification point. Also other construction and operation of tank is more important. This paper will review potential corrosion mechanism and operational case study which illustrate the importance of heating systems.

Keywords : tank, steam, corrosion, sulphur
Conference Title : ICEPEE 2015 : International Conference on Energy, Power and Environmental Engineering
Conference Location : Venice, Italy
Conference Dates : June 22-23, 2015