

## **Plant Project Requirements to Convert the Process to Handle Kerosene**

A client is considering buying part of the TTE plant and converting it to handle Kerosene at 3 bar pressure and 75 deg C. You are required to produce a comprehensive report that details the proposed conversion of the process of part of the plant that includes both V903 & V1591 and the associated systems. The plant needs modifying so that it is capable of being pressurised and vented via a relief valve system to a buffer vessel (V1591). The buffer vessel is vented to atmosphere and any condensed vapours in the buffer vessel are to be returned to the process via the plant pumping system. The project requires you to carryout a full integrity survey of the existing equipment detailing the plant layout including relevant drawings as required. You then have to produce a detailed report and plan of the requirement for the conversion and make a recommendation at the end of the report detailing all costs.

You are also required to produce a meaningful risk assessment where you need to consider all the hazards that you may encounter, and how they translate into risks associated with the work of opening up the equipment for inspection both externally and internally then detail the control measures that are required to implement and manage those activities.

The information you need to gather for your report must include all of the following areas:-

- Title & date.
- Group number and names.
- Details of all aspects of the project, this will include the existing plant condition.
- Obtain a M.D.S. for Kerosene
- Full decontamination and cleaning requirements

- Plans for containment of all effluent and washing
- Full specification of the equipment (including drawings)
- Full inspection requirements to ensure plan integrity on completion of the proposed modifications (this must include types of inspections)
- Details of any repairs and modification that are required.
- Specification of all new equipment required.
- Insulation recommendations
- Method statements, risk assessments and permit to work

The report is to include meaningful photographs of the plant area, detailed drawings and sketches as required, they should also include any areas of concern found during the inspection.

Finally, if you are in any doubts about any of the requirements of this exercise please ask.