COGDO2

Starting up equipment in downstream operations

Overview

This standard is about your contribution to starting up equipment. This must include rotating equipment, non-rotating and storage equipment, heat transfer equipment, control equipment.

This standard deals with the following:

1 Prepare to start up
2 Start up equipment
3 Communicate information during start-up
4 Correct abnormal start-up conditions

During this work you must take account of the relevant operational requirements and safe working practices AS THEY APPLY TO YOU.

This Standard is suitable for those working in the downstream fuel environment.

Previous Version:

Adapted from Unit 2 of Refinery Field Operations NOS – version April 2005

Performance criteria

You must be able to:

P1 obtain relevant authorisation for start-up to proceed
P2 correctly identify equipment and checked status
P3 correctly follow operational procedures for checks and tests
P4 identify the locations of emergency isolation valves and their reset mechanisms
P5 identify any discrepancies between the plant drawings and the procedures
P6 report any discrepancies to the appropriate personnel
P7 correctly line up the equipment
P8 inform appropriate personnel that start-up is imminent
P9 correctly start up equipment in accordance with specified procedures
P10 achieve operational conditions at each stage before proceeding to the next stage, responding and reporting any exceptions or abnormal conditions
P11 achieve normal operating conditions within required timescale
P12 inform relevant personnel when start-up is complete
P13 complete all relevant documentation
P14 identify abnormal conditions at each stage of the start up process
P15 take prompt and appropriate action to correct the abnormality, including the procedures required if the abnormality continues and does not respond your corrective actions
P16 identify the impact of the abnormality on other areas and inform relevant personnel
P17 work safely in accordance with operational and safety requirements

Knowledge and understanding

You need to know and understand:

K1 how to select, use, maintain and report defects in PPE
K2 the implications and responsibilities of statutory and organisational requirements
K3 how to interpret operational requirements
K4 plant and equipment start-up procedures, ensuring all safety guards are in place and adequate
K5 plant layout and operating manuals
K6 how to work with and within the Permit to Work system
K7 how to access relevant documentation (including permits, standard operating procedures)
K8 the function of the equipment (including rotating, non-rotating and storage, heat transfer, control) to be started in the operation of the plant and process
K9 the properties of the material contained in the equipment and plant
K10 the potential hazards associated with checks and tests
K11 the start-up over-ride procedures for the equipment
K12 line up and control systems as on process and instrumentation diagrams
K13 trip systems and logic sequences
K14 the reasons for the defined sequence in the start-up and the consequences of not following it
K15 the reasons for timing of each stage
K16 the reasons for operating equipment to specified conditions
K17 the possible process exceptions and acceptable tolerances
K18 the normal range of operating conditions and acceptable conditions
K19 the reasons for achieving conditions within a given timescale
K20 the consequences of correct conditions not being achieved
K21 alarm systems
K22 operating parameters
K23 the parameters to be measured, checked and the acceptable tolerances
K24 the reasons for recording the equipment conditions. The nature and extent of information to be communicated
K25 the appropriate selection and effective use of communication links between field operators and others
K26 the importance of clarity and accuracy
K27 the location of equipment records and methods of recording
K28 how to identify abnormal conditions

K29 the appropriate responses to alarm conditions

K30 the potential hazards during start-up and the actions to be taken

K31 the consequences of delayed response to hazards, unsafe conditions and alarms

K32 how to identify the need for appropriate assistance and where to find it

K33 the availability of standby equipment

K34 the emergency procedures and the action to be taken

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