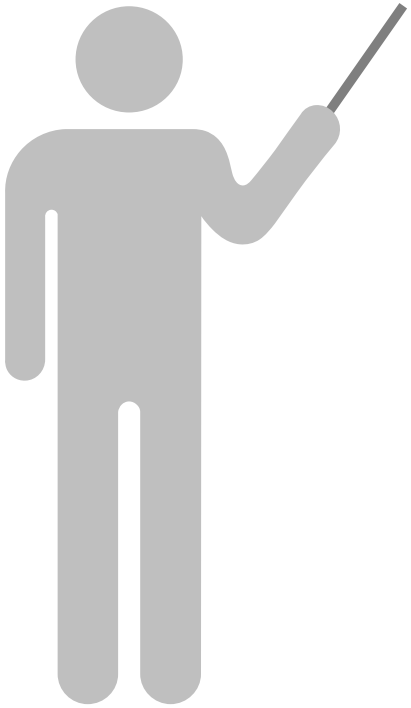
INSPECTION AND MAINTENANCE OF EXPLOSION PROOF DEVICES



HAZARDOUS ZONE CLASSIFICATION

Classifying hazardous zones according to the API RP 505 in all the operational zones of the offshore platform

TYPE OF INSTRUMENTS USED

Identifying the type of instruments used in the specific classified hazardous locations

INTRINSIC DEVICES

Inspecting the intrinsic nature of the devices used in the classified hazardous locations and red flagging wrong type of intrinsic devices used.

Challenges Faced by Shell

Classifying what are the hazardous zones?

What are the types of instruments to be used in zone specific hazardous locations?

Verification of the equipment used explosion are proof/ intrinsically safe? i.e EEx (e), Eex (d), etc

Operational Safety Breach

Solution Approach by Petrodia

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Conducting detailed study of the process and platform, and studying the parameters, piping, instruments, equipment

Identifying and verification of Hazardous Area Classification in compliance to API RP 505

Inspecting the of type of explosion and flame proof equipment [EEx (e), EEx (d), EEx (i), Eex (n)] used in Hazardous Area Zones.

Verification of appropriate explosion and flame proof instruments used in the correct Hazardous Zones

Inspection of the flame and **explosion proof** instruments and carrying out routine **maintenance activities to ensure instruments remain flame and explosion proof**

Results Delivered by Petrodia

Safeguarding plant's safety critical instruments.

Formal documentation of the hazardous zones according to their classification in the form of P&ID drawings

The existing explosion proof devices are up to the required benchmark and developed maintenance schedule to ensure integrity of the Ex Devices

Increasing operational integrity of the plant and thereby increasing the safety standard of the plant.

Cost reduction, as planned maintenance schedule enables efficient inventory management.