

A544 BP NORM Facility (ModuCon™ Containment)



▪ CLIENT

BP EXPLORATION OPERATING
CO LTD

▪ LOCATION

WINFRITH

Introduction

Nuvia designed and installed a new purpose built decontamination facility to undertake decontamination of Naturally Occurring Radioactive Material (NORM) contaminated components associated with oil production in particular from the BP-Amoco oil production site at Wytch Farm in Dorset.

Scope of Work

This Naturally Occurring Radioactive Material (NORM) forms as a scale on production equipment, pumps and manifolds during oil extraction. Whilst involving radiation levels significantly lower than those found in nuclear research or power station operations the components must be cleaned

of the scale prior to maintenance being carried out or the materials being scrapped.

The cleaning operations are carried out using ultra high pressure water jetting (UHPWJ) system set within a bunded and ventilated ModuCon containment unit. The NORM scale is then sent for disposal as low level waste to the Drigg repository.

The ModuCon containment system was used as the primary containment for the UHP water jetting operations. A high extract flow rate HEPA filtration ventilation system with an extract rate of 3.8 cu.m/sec was integrated with the ModuCon unit. The MCS employed an integrated support framework to carry the ventilation system and support the span of the MCS roof.

The ModuCon unit was mounted onto four interconnected load bearing water bunds. Process water collected in these bunds was then processed through the plant filtration and clean up equipment.

Due to the nature of work, operators use full face breathing respirators within a specific UHP water jetting suit, using integrated wireless communications system with acoustic noise cancelling.

Nuvia's ModuCon Modular Containment System consists of prefabricated fire retardant GRP (Glass Reinforced Plastic)



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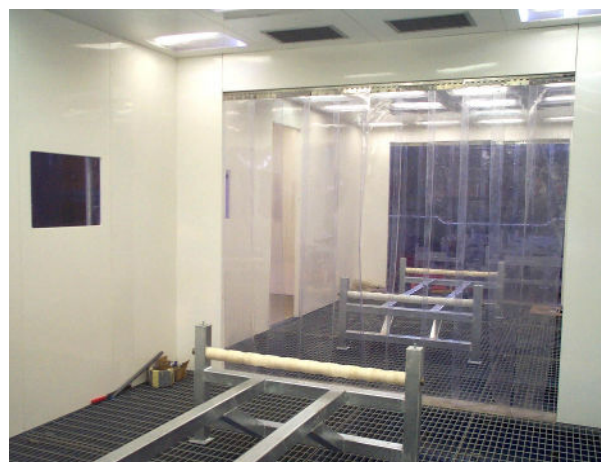


panels which can be bolted together to form a containment. This allows the user to construct a room-like enclosure around plant or equipment to prevent the spread of contamination.

The modular construction allows an enclosure of almost any size and shape to be assembled quickly and cheaply. After use, the system is easily cleaned, dismantled and stored flat, ready for re-use.

Conclusion

The facility has been successfully operated to date.



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