

Successful Bulk Sludge Transfer Trials

September 2014

James Fisher Nuclear (JFN) has successfully demonstrated an innovation in bulk sludge transfer using pumps and submersible Remotely Operated Vehicles (ROV) to support nuclear pond decommissioning



Over 35 personnel from Sellafield attended a successful demonstration of bulk sludge transfer at JFN's ROV dock facility at Barrow-in-Furness earlier this month. The retrieval and transfer of sludges from nuclear ponds is one of the key decommissioning challenges facing Sellafield Ltd.

JFN's technology trial involved the deployment of the equipment and relevant mock-up kit required onto the bed of the dock using a barge crane. This equipment included a tethered slurry pump, ROVs, a skip and dumpy bags filled with sludge simulant. One ROV was used to manoeuvre the slurry pump into position on the bed of the bay and another ROV was used to attach the discharge hose from the pump to the skip and also supported the deployment of the inlet hose used to perform the sludge pumping operations. The sludge was discharged into a filter bag lining the skip; when lifted out of the dock, the water drained out, leaving only the sludge.

The trials successfully demonstrated that sludge could be retrieved and transferred using this technique and that filter bags could be used to de-water sludge. The trial was commissioned by Sellafield Pile Fuel Storage Pond, who need to transfer sludge within the Pond Decanner Bays and discharge it into the main pond. However, the technique can be used in other pond projects requiring sludge retrieval and transfer.

This success of these JFN trials is a perfect demonstration of how the innovative use and integration of various techniques and technologies can provide cost effective and safe solutions. The use of ROVs allows successful, quick and cost effective integration and implementation which could not be achieved readily by traditional remote handling techniques deployed from outside the pond.

JFN's business development manager, Simon Pyne, said "The innovation demonstrated impressed all attending and many see applications in their pond projects which will accelerate and reduce decommissioning costs"

PRESS RELEASE



Pump with inlet and discharge hoses attached



Remote control of the ROVs from the dock side



Retrieved sludge in filter bag



ROV lowered into the dock



ENDS

Notes to editors:

James Fisher Nuclear is an established supplier of specialist engineering, manufacturing and technical services for applications within challenging environments or with high integrity requirements.

For more information see www.jfnl.co.uk

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