

JNFL Issues Report on Re-inspection of BP Pit Leakage

On August 19, Japan Nuclear Fuel Ltd. (JNFL) issued a report on the results of a re-inspection it had made on a water leakage that had occurred at a pit for burnable poisons in the receiving and storage facilities for spent fuel at its Rokkasho Reprocessing Plant. It was confirmed this time that there were not any other scratches or damaged areas in the equipment that would be in danger of forming a puncture besides the spot that had caused the earlier water leakage.

The re-inspection of the equipment took place from July 6 to August 18 at 426 machined triple-angle bent corners. Besides confirming the inspection records made the last time, a reconfirmation was made of the same areas using recorded images on DVD. In addition, external inspection was made using an underwater camera, and other detailed external inspections were also made.

Of the 426 machined corners inspected, 24 were found not to have needed any on-site adjustments from the original specifications during installation, confirming that no welding work was done there outside of that in the original plan.

Of the remaining 402 corners, 108 were found during the previous inspection or through ferrite (magnetic) measurements to have been mended through additional welding (besides that required in the original plan).

Of the remaining 294 corners, a reconfirmation of the DVD images taken during the previous inspection showed that the lining plate in 94 spots had a satin-finished surface*, indicating that no additional welding had taken place there.

Of the remaining 200 corners, the external on-site inspection by underwater camera showed that 128 had a satin-finished surface* on their lining plates, again indicating the lack of any additional welding.

Of the remaining 72 corners, then, a detailed external inspection showed that no additional welding had taken place.

JNFL will undertake several other activities related to the leakage, particularly the creation of additional maintenance regulations concerning the fuel storage pool, and the development of remote underwater location and repair technology for leakage spots.

** The term "satin-finished" refers to the mottled surface (similar to the skin of a pear) that appears on the surface of a lining plate that has not been polished down. In contrast, welded areas that were not in the original plan were polished down by a grinder, resulting in a glossier surface than the unpolished "satin-finished" areas. That means that the existence of a satin-finished surface can be taken as evidence that no additional welding took place.*

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