



Japan Atomic Energy Research Institute (JAERI), nowadays Japan Atomic Energy Agency (JAEA)

70 million
Euros saved compared to theoretical
cost of vitrification

Cesium and strontium removal from reprocessing liquid, 1997 - 1998.
70 m³ of reprocessing liquid was purified with a new nuclide removal system to lower activity level enabling cheaper further treatments.

CsTreat and SrTreat was used to remove cesium and strontium.

Nuclear site: JAERI Research Center
Location: Tokai-mura, Japan
Surrounding water environment: Pacific Ocean
Customer: Japan Atomic Energy Research Institute
Operation period: 1997 -1998

RESULTS

CsTreat and SrTreat was used in a small columns and liquid was pumped through them. Cesium and strontium was purified with high decontamination factor to a level which made it possible to pump liquid for further treatment through existing pipelines.

DESCRIPTION OF THE PROJECT

70 m³ of reprocessing liquid was stored in an underground tank, and there was no treatment system available nor transportation pipelines, since its activity was 7 GBq/l of strontium and 7 GBq/l of cesium. A new nuclide removal system was designed and installed, and liquid was purified to lower activity level enabling cheaper further treatments. CsTreat and SrTreat was used to remove cesium and strontium.