



[Form 2 (to be reported to Committee on Countermeasures for Contaminated Water Treatment and to be disclosed to public)]

| Technology Information | |
|--|---|
| Area | 1 (Select the number from "Areas of Technologies Requested") |
| Title | Technologies for detection of minor leaks: <i>Improvement in the detection ability of beta rays on patrol</i> |
| Submitted by | Salvarem a Nuvia company, Soletanche Freyssinet group |
| <p>1. Overview of Technologies (features, specification, functions, owners, etc.)</p> <p>R&D of a new beta probe with modification of the plastic scintillator foil, new electronic an algorithm treatment to be able to count only beta emission with gamma dose rate. .</p> <ul style="list-style-type: none"> ▪ Surface contamination density of beta rays (Bq/cm²) can be measured by removing the effect of radiation by gamma rays (approx. 50 μSv / h of 1 cm dose equivalent). ▪ No shielding needed: the detectors stay light and portable for workers. | |
| <p>2. Notes (Please provide following information if possible.)</p> <ul style="list-style-type: none"> - Technology readiness level (including cases of application, not limited to nuclear industry, time line for application). <p>R&D development / time line for application 2014</p> <ul style="list-style-type: none"> - Challenges - Others (referential information on patent if any) <p>Patent</p> | |



【Areas of Technologies Requested】

- (1) Accumulation of contaminated water (Storage Tanks, etc.)
- (2) Treatment of contaminated water (Tritium, etc.)
- (3) Removal of radioactive materials from the seawater in the harbor
- (4) Management of contaminated water inside the buildings
- (5) Management measures to block groundwater from flowing into the site
- (6) Understanding the groundwater flow