

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

Technology Information	
Area	1 Accumulation of Contaminated Water
Title	Water Solidification Process
Submitted by	Ceram
<p><b>1. Overview of Technologies (features, specification, functions, owners, etc.)</b></p> <p>Ceram is a UK-based materials consultancy with expertise in developing processes for dealing with nuclear waste. Ceram also has extensive experience of testing and analysis of nuclear related materials.</p> <p>The Ceram Water Solidification Process uses technology specifically developed to solidify volumes of water.</p> <p>The Ceram Process has been demonstrated successfully with both ordinary (fresh) water and sea water.</p> <p>The Process itself is based on inorganic chemical reactions that result in the water being solidified. The water becomes a part of the chemical structure of the solid and is therefore immobilized.</p> <p>It is important to note that the Process is not based on cement reactions nor does it involve organic polymers. It is a completely inorganic system.</p>	

2. Notes (Please provide following information if possible.)

- Technology readiness level (including cases of application, not limited to nuclear industry, time line for application)
  
- Challenges
  
- Others (referential information on patent if any)

**【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