

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

Technology Information	
Area	1, 2, 4, 5, 6
Title	Treatment, management, solidification, sealing of pipes and surrounding structures, understanding groundwater flow
Submitted by	Geochemie Sanierungssysteme GmbH, Germany
<p>1. Overview of Technologies (features, specification, functions, owners, etc.)</p> <p>Contaminated liquids, water etc. can be fixed, solidified and stabilized with Tubogel T1+T2 by adding sand or other stone like aggregate to produce a solid, sandstone like, unit.</p> <p>The contaminated liquid, water, will be mixed with Tubogel components and than by adding sand or other stone like aggregate consolidated, hardened in a basin or were it is.</p> <p>The than produced block is not anymore water soluble and can be sealed with concrete to prevent further radiation.</p> <p>Based on the above can liquids or water which have penetrated the soil be stabilized and locally fixed.</p> <p>The GeoChemie Tubogel components are since 1996 in the market, predominantly in Europe and the Middle East to prevent sewage and other toxic waters to spill into the ground and spoiling groundwater etc.</p> <p>The Tubogel components are certified by the German Institute of Building Standards and the German Institute for Hygenic Standarts in Gelsenkirchen, Northrhine Westfalia and therefore cleared Germany wide.</p> <p>The owner of the Tubogel Products, Names, Rights of Product Formula, Rights of Manufacturing, Rights of Application etc., are all with:</p> <p>Geochemie Sanierungssysteme GmbH  Wettersteinstrasse 10  82024 Taufkirchen  Germany  <a href="http://www.tubogel.de">www.tubogel.de</a></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)

The Tubogel Products can be used and applied for multipurpose, their use is not limited to the nuclear industry.

The application can start as soon as the goods are on site, this depends on the shipping time from Germany.

- Challenges

The challenge to solidify nuclear contaminated water and thereby stop spillage of the same, can be done, as well as the sealing of pipes and surrounding structures.

Tubogel is NON-PETROCHEMICAL, this ensures that there is no hazard to ground- or drinking water, or human beings involved with the application.

- Others (referential information on patent if any)

Geochemie, Tubogel and it's application are protected by German an European laws, protection in Japan is applied for.

**【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