

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

Technology Information	
Area	5
Title	Management measures to block groundwater from flowing into the site
Submitted by	Geocomp Corporation in collaboration with Moretrench America and Mueser Rutledge Consulting Engineers
<p>1. Overview of Technologies (features, specification, functions, owners, etc.)</p> <p>Provide engineering design and construction expertise to design and aid in the construction of the most cost effective underground seepage barriers to divert groundwater away from the site. Our team of design and construction experts offers to work with Japanese counterparts to help identify and select the most cost effective measures from among soil-clay filled slurry walls, grouted walls and in-place mixed walls to divert underground water away from the site. We can also provide experienced personnel, equipment and materials to help facilitate the rapid construction of such barriers. Additionally, we can advise on methods of quality control and performance evaluation to help ensure that the completed facilities perform as intended.</p>	
<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) Ready for immediate deployment. Low risk. No limitations on applications - Challenges Design and construction of underground seepage barriers that work effectively require a thorough knowledge of the geological and geotechnical conditions in which they are to be constructed and the existing groundwater conditions. They also require very careful control over the execution and quality of the work; otherwise “holes” or “windows” can be left in the barrier that work like holes in a bathtub and 	

greatly reduce the effectiveness of the barrier. Many contractors are capable of constructing such barriers but few have the knowledge and experience to construct them optimally, that is make them perform at a high level for a reasonable cost. Our team has broad and deep experience in all of the potential methods of creating underground seepage barriers that work. We believe including our team into the project team would provide a very effective way to help obtain a high level of performance in a cost effective manner delivered as quickly as possible with a minimum of risk.

- **Others (referential information on patent if any)**

We have successfully designed and overseen the construction of 5 km of seepage barrier using the soil-mix slurry wall method at Kawasaki Refinery that worked very well. We are prepared to participate at any level in the design and construction of underground seepage measures by any method that fits the site conditions.

【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