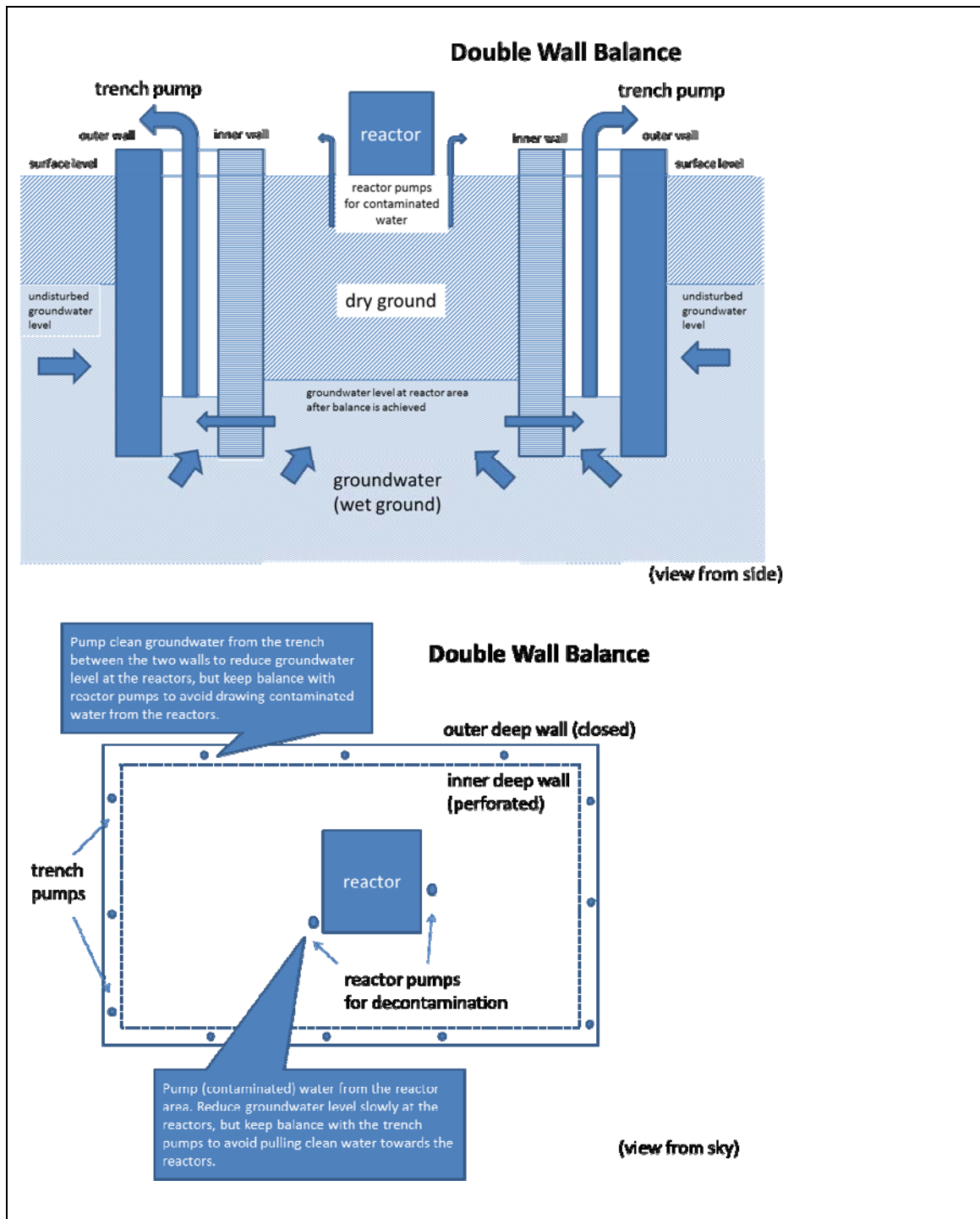


[Form 2 (to be reported to Committee on Countermeasures for Contaminated Water Treatment and to be disclosed to public)]

Technology Information	
Area	5 (Select the number from "Areas of Technologies Requested")
Title	Double Wall Balance (Idea)
Submitted by	Franz Trieb, Germany
<p>1. Overview of Technologies (features, specification, functions, owners, etc.)</p> <ul style="list-style-type: none"> • Build a double wall around the reactors forming a deep trench in between. The outer wall should be massive while the inner wall should be perforated to let water that comes from below the reactor area sip into the trench before it reaches the reactor. • Pumping water from the trench will lower the groundwater level in the trench and, more slowly, also inside the reactor area. • The outer wall must be closed to all sides on its total height and length, so it will stop groundwater flow towards the reactors from the side, but not from below. • The inner wall must be perforated so groundwater entering from below will be pulled into the trench by the trench pumps before it reaches the reactors. • A good balance between the reactor decontamination pumps and the trench pumps must avoid pulling contaminated water towards the trench or pulling clean groundwater towards the reactors. <p>The double wall balance serves to increase the distance between groundwater and the nucleus and to avoid new groundwater flow towards the reactors. Remember this is only an idea you must check with experts.</p> <p>Good Luck!</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)

Should be possible to build with state of the art technology. The trench concept is used worldwide to reduce groundwater level in wetlands, although usually not as deep as needed here. The balance idea has not been applied yet.

- Challenges

This is only an idea that has not been applied yet, check with experts

- Others (referential information on patent if any)

none

【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