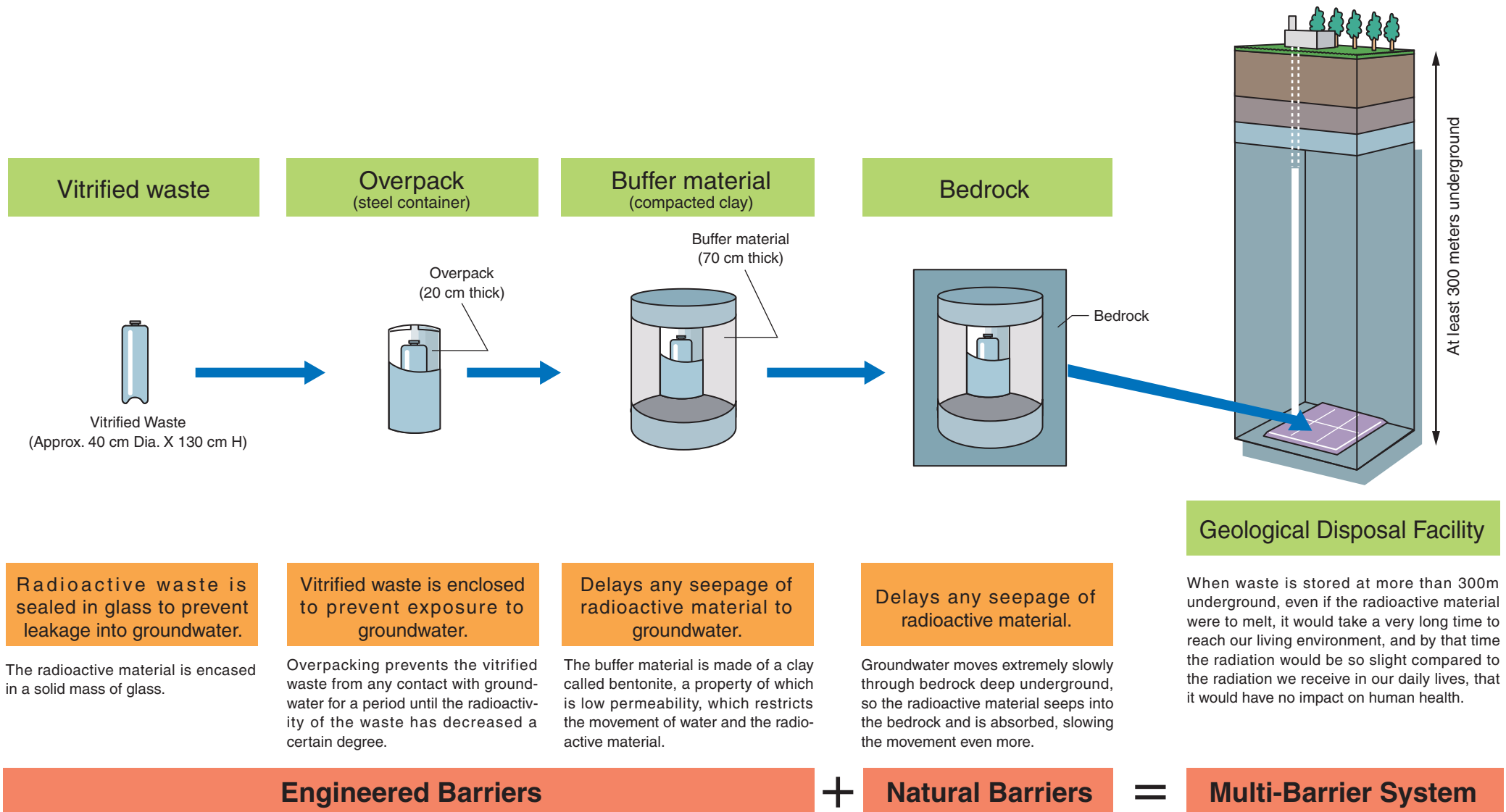


Multi-Barrier System for Disposing of High-Level Radioactive Waste



Radioactive waste is sealed in glass to prevent leakage into groundwater.

The radioactive material is encased in a solid mass of glass.

Vitrified waste is enclosed to prevent exposure to groundwater.

Overpacking prevents the vitrified waste from any contact with groundwater for a period until the radioactivity of the waste has decreased a certain degree.

Delays any seepage of radioactive material to groundwater.

The buffer material is made of a clay called bentonite, a property of which is low permeability, which restricts the movement of water and the radioactive material.

Delays any seepage of radioactive material.

Groundwater moves extremely slowly through bedrock deep underground, so the radioactive material seeps into the bedrock and is absorbed, slowing the movement even more.