RAD FACTS about Irradiated Fuel Bays

After being removed from the reactors, irradiated fuel bundles are stored for 7 to 10 years in in-ground pools of water, which provide cooling and shielding, until it is safe to move them to dry storage.

Used nuclear fuel produces several types of ionizing radiation, some of which can easily penetrate matter. Therefore, the fuel needs to be shielded.

Water is an excellent shielding agent because it is relatively dense (1g/mL) and uniform. Water also acts as a good cooling agent.

One metre of water decreases the dose to a worker by a factor of 100,000.

Three metres of water decreases the dose by a factor of 10 trillion.

The fuel is covered by 3 to 5 m of water.

Water temperature is 28 to 31˚C.

Bays are constructed to meet seismic standards.

Bays are 6 - 8 m deep (Olympic diving pools are only 5 m deep).

1 m deep

2 m deep

3 m deep

4 m deep

5 m deep

6 m deep

7 m deep

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