The investigation about tritium 2019.9.27 Seiji Tanabe

As a derivation matter of the Japan-Korea problem, indication is made about end disposal of handling of Fukushima Nuclear Power Plant water now by Korea.

Therefore at this chance I try for grasping the present situation definitely and want to prepare for an argument so that a lie is not scattered in the world.

By follows, I investigate it and examine it.

Contents

1 Right grasp of the present situation

- (1) Quantity of untreated water of the present 1,160,000t 1 quadrillion Bq
- (2) The tritium density of water 1 million Bq/ (Tritium included in 20g)

X It is purified by "radiological removal device" ALPS

- (3) Way of the existence of tritium Seawater
 Note) ND: Clipped form of "not detected" or "no detection")
 (3) Way of the existence of tritium Seawater
 (3) May of the existence of tritium O. 1Bq/l
 (5) Rq/l
 (6) ND
- 2 The end treatment method that is thought about now

Past disposal

Release it in the ocean: In one year 380 trillion Bq

(reference: Tritium included in the rainfall 223 trillion Bq in one year)

Future processing plan

Ocean-releasing standard by the London treaty

In less than 60,000 Bq/l, it is released by nuclear power generation. The marine release from a ship shall not be permitted.

(1) Ocean-releasing

- (2) Steam release \cdots high cost of production
- (3) Hydrogen release (Electrolysis)
- (4) Stratum infusion
- (5) Undergrounding (Mix it with concrete)

····A very large place is necessary

3 Processing plan at the present

There is only marine release of 2-(1) mentioned above. Thus, we dilute it to become less than the upper limit density of London treaty (60,000 Bq/l) and release the ocean.

By the way, the Korean upper limit assumes it 40,000 Bq/l. But there is not an international grasp document, and the density at the time of the processing that I released is really unidentified.

(Property of tritium)

1 Half-life of approximately 12 years, Beta beam of the energy that the radiation is weak, The atmospheric progress 5mm, 0.005mm slight as for the underwater progress.

2 The radiation from tritium stops at the surface of the skin. When I swallow tritium by breathing or when I breathe it in, it is exhausted by metabolism. Therefore, it is not accumulated in the body.

3 Total estimated radiation exposure doses of radioactivity of a person living in around nuclear power generation is 0.00001mSv in one year.

This is around a one-100,000th than a radiation dosage safety limit (for one year less than 1mSv) to fix for a law.

In addition, it is around a one-200,000th even if I compare this with the annual radiation exposure dose of radioactivity (2.4 mSv) of the natural radiation (background).