環境省
Ministry of the Environment

Results of sea area monitoring related to ALPS treated water conducted by the Ministry of the Environment

Environmental Management Bureau
Marine Environment Division

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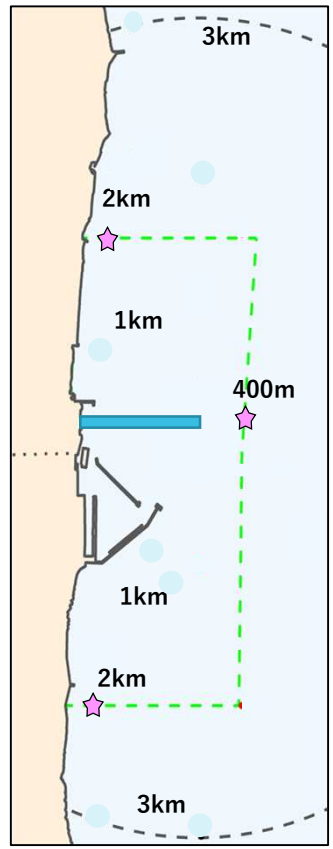
SUSTAINABLE DEVELOPMENT GOALS
Re-Style
デコ活 くらしの中のエコろがけ
つなげよう、支えよう 森里川海
Plastics Smart

Seawater results

The results are significantly below various standards like the regulation standard or WHO drinking water guidance level, including results below the DL.
These results are not at a level that would affect people and the environment.

Seawater	Past Fluctuation Range (Apr. in 2015 – Jul. in 2023)	Before discharge (Apr. in 2022– Aug. in 2023)	After discharge (-Jul. in 2024)	After discharge (Aug. in 2024-)
H-3 (29 sampling points)	ND–20	ND–0.17	ND–5.0	ND–0.19
Cs-137	ND–1.1	0.0031–0.031	0.00093–0.022	0.00022–0.044
Sr-90	ND–0.76	0.00055–0.0011	0.00058–0.0079	ND–0.0088
Ba-137m	ND–1.0	0.017–0.029	0.0072–0.042	0.0026–0.034
Pu-239+ Pu-240	ND–0.000036	0.0000082–0.000026	0.0000022–0.0000074	ND–0.0000062
Am-241	No Data	0.0000033–0.000012	ND–0.0000064	ND–0.0000040
U-234	No Data	Not Measured	0.040–0.044	0.044–0.048
U-238	No Data	Not Measured	0.036–0.040	0.037–0.042
Y-90	ND–0.76	0.00070–0.0011	0.00067–0.0079	0.00062–0.0088
C-14	No Data	0.0047–0.0061	0.0051–0.0060	0.0058–0.0059



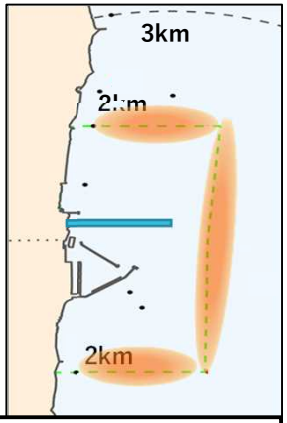
※ Nuclides for which all results were below the detection limit are excluded from the table.
※ Refer to the Environmental Radiation Database. The data analyzed by nuclear operators was excluded.
※ For U-234 and U-238, no past measurement data was available for the surrounding areas, such as off the coast of Fukushima Prefecture, but the values were comparable to those obtained from general uranium element concentrations in seawater (U : 3 μg/L(0.04 Bq/L) and U-234/U-238≒1.1)*. * MEXT, The Series of Environmental Radioactivity Measuring Methods No.14

Marine biota results

H-3 concentration is almost same as in the surrounding seawater, and concentrations of C-14 and I-129 are almost same as they were before the discharge.
These results are not at a level that would affect people and the environment.

Fish	Past Fluctuation Range (Apr. in 2015 – Jul. in 2023)	Before discharge (Apr. in 2022– Aug. in 2023)	After discharge (–Jul. in 2024)	After discharge (Aug. in 2024–)
FWT	No Data	ND–0.18	0.042–1.6	0.069–0.18
OBT	No Data	ND	ND–0.11 Bq/kg fresh	ND
C-14	No Data	16–28 Bq/kg fresh	19–30 Bq/kg fresh	20–26 Bq/kg fresh

※ The Environmental Radiation Database was referenced.
※ Tritium data for fish are included, but no description of FWT or OBT.



Fish(13 species)：Paralichthys olivaceus, Squatina japonica, Okamejei schmidti, Pagrus major, Myliobatis tobijei, Nibea mitsukurii, Hemitrygon akajei, Chelidonichthys spinosus, Lophiomus Setigerus, Eopsetta grigorjewi , Triakis scyllium, Platycephalus sp.2, Carchahinus obscurus
Seaweed(6 species)：Laminaria, Ulva, Eisenia bicyclis, Grateloupia lanceolata, Ahnfeltiopsis paradoxa, Chondrus giganteus

Seaweed	Past Fluctuation Range (Apr. in 2015 – Jul. in 2023)	Before discharge (Apr. in 2022– Aug. in 2023)	After discharge (-Jul. in 2024)	After discharge (Aug. in 2024–)
I-129	No Data	ND	ND	ND