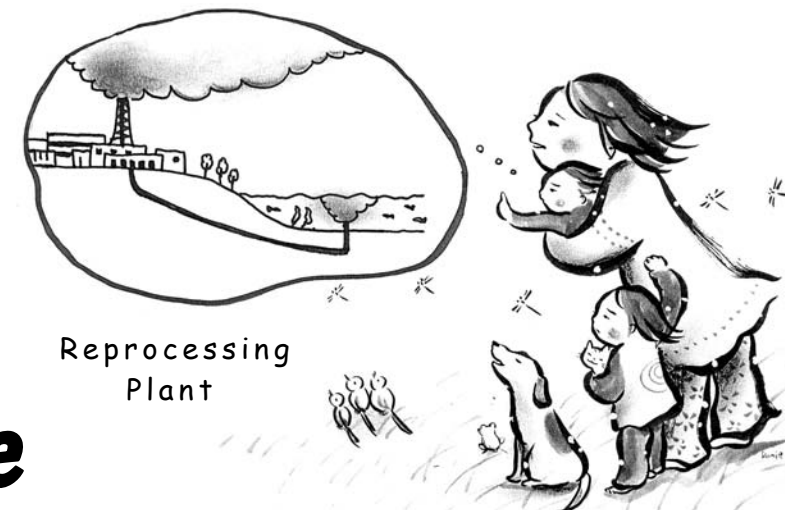


REPROCESSING PLANT in ROKKASHO

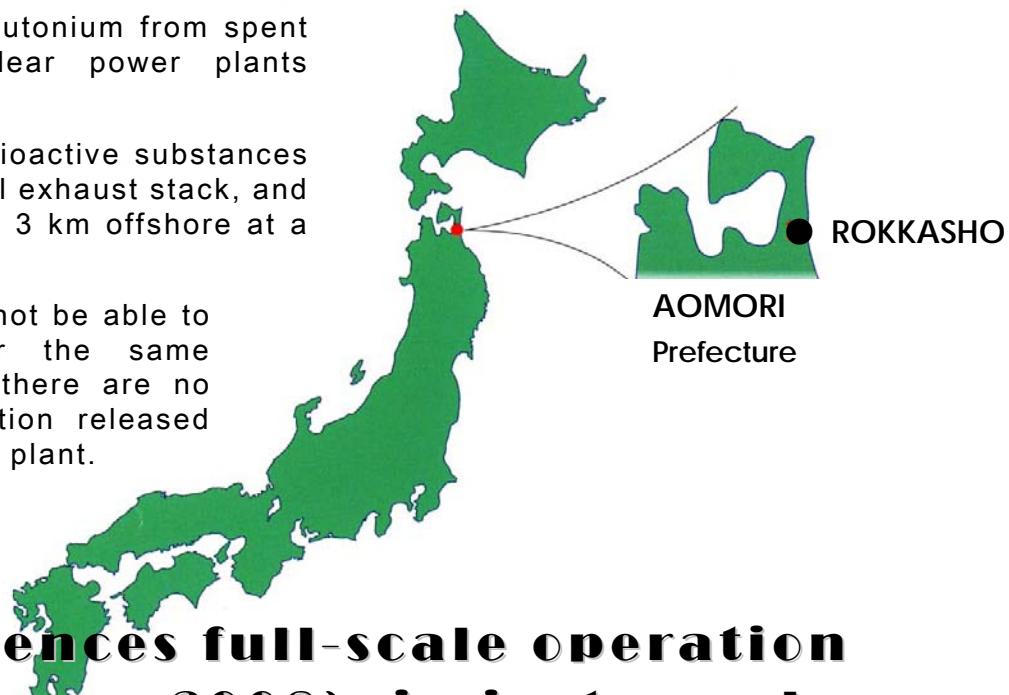
Massive Radioactive Pollution of the Ocean and the Atmosphere



Reprocessing
Plant

The Spent Nuclear Fuel Reprocessing Plant

- It is a chemical facility to extract plutonium from spent nuclear fuel collected from nuclear power plants throughout Japan.
- The reprocessing plant releases radioactive substances into the atmosphere from a 150 m tall exhaust stack, and into the ocean from an effluent pipe 3 km offshore at a depth of 44 m.
- Since the reprocessing plant would not be able to comply with and operate under the same regulations as for nuclear plants, there are no concentration regulations for radiation released into the ocean from the reprocessing plant.



If this plant commences full-scale operation (scheduled for summer 2008), in just one day, the plant will release an amount of radioactivity equivalent to the amount released from a nuclear power reactor in one year.

Our Heartfelt Plea

Please do not release massive amounts of radioactive substances into the ocean and atmosphere!!

The ocean and atmosphere are globally connected. We share the Earth with a diversity of living beings in addition to humans. If the reprocessing plant commences operation, it will harm humans, plants, and animals in other countries as well as in Japan. Furthermore, it will leave an irreparable bitter legacy to the following era.



We Oppose Operation of the Rokkasho Reprocessing Plant



Approximately 1 million signatures on petition opposing operation of the plant

Citizens groups collected a total of 105,000 signatures in November 2007 and January 2008 on a petition, "Do not release radiation into the ocean and atmosphere". In addition, in January and March 2008, fishery unions, consumer groups and surfing groups submitted a petition with 880,000 signatures to the government to "Prevent Operation of the Reprocessing Plant".

Petition for legislation to regulate radiation releases

Citizens groups, fishery unions, and consumer groups submitted a petition to the municipal governments. In Iwate Prefecture (which has the most bountiful fishing grounds in northern Japan), 29 of the 35 municipalities adopted the petition.

Problems with the Rokkasho Reprocessing Plant

◎ **It will release enormous amounts of radiation for a long time**

The reprocessing plant releases radioactive substances into the atmosphere and ocean. The quantity emitted is about 379 times that emitted from a nuclear power reactor (1000 MW caliber). The reprocessing plant emits such large amounts of radiation because the process of breaking down and dissolving spent nuclear fuel releases radiation that had been contained within the fuel rods. Since it is not feasible to supply the enormous amounts of water necessary to dilute the liquid tritium releases to comply with standards for nuclear power plants in Japan, regulations on the concentration of radioactive emissions into the marine environment from nuclear power plants will not apply to this plant. In addition, for mainly economic reasons, the facility is not equipped to remove krypton-85 and tritium from the discharges, and all will be released into the environment. If the plant commences full operation, this enormous amount of radiation will continue to be released over the next 40 years. Of the radioactive substances, some continue to emit radiation over a long period (for example, iodine-129 has a half-life of 16 million years), and become concentrated in the food chain.

◎ **A fault line runs directly under the reprocessing plant, and may trigger a magnitude 8 earthquake**

◎ **Unclear where the extracted plutonium will go**

If the reprocessing plant begins full-scale operation, 8 tons of plutonium will be extracted annually. However, regarding the main uses for this plutonium, prospects are poor for the fast breeder reactor, and the pluthermal program for burning MOX fuel (plutonium and uranium mixed oxide) in existing nuclear plants is at a standstill. Furthermore, now, even without reprocessing, Japan already has approximately 45 tons of plutonium in storage.