

A Resolution Against the Ocean Dumping of Radioactive Tritium-contaminated Waste Water From the Fukushima Nuclear Power Plant

Members of the Association for Citizens and Scientists Concerned about Internal Radiation Exposures (ACSIR) and citizens and scientists who are concerned about internal radiation exposure

July 20, 2018

It was announced in March, 2014, that in the defunct Fukushima Nuclear Power Plant there was a total of approximately 3,400 trillion becquerels of tritium, with 830 trillion becquerels stored in tanks. This enormous amount of radioactive waste water has still continued to increase since then. In these circumstances, the Japanese government and Tokyo Electric Power Company Ltd. (TEPCO), in their efforts to find an easy way to dispose of the tritium-contaminated waste water created by the Fukushima nuclear disaster, have been trying to dilute and dump it into the ocean. They have been watching for an unguarded moment among the opposition movements, such as fishery cooperatives. Now they are about to finally decide to implement the ocean dumping plan. Far from regulating such activities, Toyoshi Fuketa, the chairman of the Nuclear Regulatory Authority has been championing this plan.

We are determined that the Japanese government and TEPCO shall never dump the radioactive waste water into the ocean for the following reasons:

1. Generally misunderstood as posing little risk to life and health, tritium is an extremely hazardous radioactive material. This is because organisms are not able to chemically distinguish tritium water from the normal water which composes most of the human body. This means that tritium can invade any part of the human body, irradiating it from inside; therefore, tritium can damage cell membranes and mitochondria in cells, indirectly through reactive oxygen species (ROS) and other radicals generated in irradiation. Tritium decay can directly cut chemical bonds of genomes or DNA strands. The risk peculiar to tritium is that if some hydrogen atoms which make up the genomes are replaced with tritium, the beta decay of the tritium into helium will cut off the chemical bonds of the genome.

Plants produce starch from water and carbon dioxide gas by using photosynthesis. Some of hydrogen atoms in this starch can be replaced with tritium, forming organic tritium, which animals, plants and human beings absorb into their bodies over the long term, causing internal radiation.

2. With reference to the tritium released by various nuclear facilities, reports indicate a number of findings including: an increased incidence of leukemia among those living around the Genkai Nuclear Power Plant; an increased incidence of infant leukemia around nuclear reprocessing plants all over the world; and an increased incidence of child cancers around nuclear power plants. Real damage has already occurred.

3. Tritium, even if diluted and dumped into the ocean, will become concentrated again through aspects of the ecosystem such as food chains. Furthermore, tritium will vaporize into tritium-containing moisture or hydrogen gas only to return to the land and eventually circulate within the environment. The idea that dilution ensures safety has caused fatal blunders to be repeated in many environmental pollution cases in the past, the vital factor being the total quantity released into the environment. Therefore, as far as environmental pollution problems are concerned, the only righteous and principled policy is to thoroughly confine and isolate radioactive materials or toxic substances from the ecosystem.

As tritium has a long half-life of 12 years, it destroys the environment over the long term. Tritium is an isotope of hydrogen which constitutes not only most of the living body but also its genes, so tritium disposal via dilution cannot be safe. Thus, we strongly urge the Japanese government and the Nuclear Regulatory Authority never to dump tritium into the ocean.

The resolution assenters:

As of August 5

Individuals:

淡川典子、青木幸雄、青柳行信、伊集院真知子、上里恵子、吾郷健二、吾郷成子、阿部毅、阿部健太郎、阿部めぐみ、有田武生、アントニオ弓削、池村奈津子、石岡敬三、石川隆之、石下直子、石田紀郎、石堂太郎、伊集院真知子、稲垣博美、稲垣睿、印南敏夫、今田裕

作、岩田深雪、上野益徳、上野祥子、魚住 公成、魚住 優子、内海洋一、宇野朗子、衛藤英二、遠藤順子、及川洋子、大倉弘之、岡田俊子、小木曾茂子、小野英喜、大沼淳一、大見哲巨、大和田幸嗣、大湾宗則、奥森祥陽、尾崎一彦、尾崎憲正、尾崎宗璋、落合栄一郎、落合祥堯、小野寺晶、折原利男、勝部明、川崎陽子、川添 務、河原よしみ、木次昭宏、木原和子、木村千亜紀、許照美、熊谷まき、黒河内繁美、黒田節子、鋏野保雄、権 龍夫、国分 天、小林立雄、小柴信子、児玉順一、小橋かおる、後藤五月、小針修子、小東ゆかり、小林久公、小宮市郎、小山潔、コリン・コバヤシ、今 正則、斉藤さちこ、齊藤智子、佐藤和利、佐藤京子、佐藤大介、澤田昭二、嶋田美子、島安治、下澤陽子、下山久美子、庄司善哉、白井 健雄、白鳥紀一、菅原佐喜雄、杉野恵一、鈴木則雄、鈴木紀雄、砂川正弘、高木和美、高階喜代恵、高瀬光代、滝本 健、田代真人、橘 優子、館澤みゆき、田中一郎、田中清、高木 伸、高橋精巧、高橋武三、高松利昌、辻 陽子、辻本 誠、哲野イサク、寺尾光身、友田シズエ、外谷悦夫、富田孝正、中川洋子、中沢浩二、長尾高弘、長澤民衣、中須賀 徳行、永田文夫、名出真一、中西 綾子、中村由紀男、奈良本英佑、難波希美子、西尾正道、西川生子、西川隆善、西里扶甬子、根本 勘、野村修身、萩原正子、萩原ゆきみ、橋爪亮子、橋本恵美、馬場利子、林敬次、原田二三子、平佐公敏、福島敦子、藤井隼人、藤井弘子、藤原寿和、船富和枝、星川まり、松井英介、松井和子、松岡 由香子、松尾美絵、松沢哲成、松久寛、三上幸子、水鳥方義、水戸喜世子、宮口高枝、宮寄やゆみ、宮下京子、宮永崇史、向平恵子、向平真、三ツ林安治、三室勇、森下育代、森田眞理、矢ヶ崎克馬、八木和美、梁取洋夫、矢野勝敏、山口サエ子、山崎清、山崎知行、山崎正彦、山田五十鈴、山田清彦、山田耕作、山田勝暉、山田敏正、山田 誠、山本清子、山本英彦、横山恵子、横山義弘、横山由美子、吉田明生、吉田恵子、吉田素直、米澤鐵志、わしおとよ、渡辺悦司、渡辺典子、渡辺眞知子、

Organizations:

太田川ダム研究会、クライストチャーチの風、さよなら原発神戸アクション、静岡放射能汚染測定室、全国金属機械労働組合港合同アート・アド分会、脱原発はりまアクション、脱被ばく実現ネット、京都脱原発原告団、核燃を考える住民の会、核燃から郷土を守る上十三地方住民連絡会議、

If you agree with this resolution, please e-mail to Kosaku Yamada.

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