

Name

Instructor

Course

Date

Persuasion Letter: Radiation in the Ocean

It has been a little over three years since Japan was stricken with a 9.0 magnitude earthquake followed by flooding by a huge tsunami that was clearly more than what could be anticipated. A catastrophic failure of half of the Fukushima Nuclear Power plant's nuclear reactors followed, resulting in the deaths of more than 20,500 people in the affected areas and the displacement of 320,000 more (Ohnishi, 2). The largest impact from this disaster, which is second only to the Chernobyl disaster, will be from the large amounts of radioactive water dumped into the air, soil and eventually the sea. The Fukushima accident brought the human race to acknowledge the reality of nuclear disasters and the effects they can cause.

Unfortunately, the aftermath of the disaster still lasts until this day. Radioactive materials such as iodine and cesium were discharged into the waters of the Pacific Ocean (Kawamura et al., 1349) and are bound to spread through the sea to other parts of the world. The estimated volume of radioactive water discharged was estimated at 270 tons as reported by the Tokyo Electric Power Company (TEPCO) despite their best efforts to prevent the same from occurring (The Associated Press). The United States is one of the destinations most likely to be affected first when this eventually happens due to its proximity to Japan. It has been reported that the radioactive water is expected to wind up in the West Coast as soon as 2014.

This news has inevitably brought about concern by the citizens, especially regarding coastal seafood (Adelman). However, researchers have moved fast to allay fears that the level of radioactive isotopes in the coastal water are still below the levels that are considered safe. Continuous monitoring is expected throughout the year to monitor this level as the Fukushima residue is expected to be felt along the coast of the United Coast and Canada during the course of the year. The first traces are expected around April, depending on the ocean currents.

Despite these reassurances, it is evident that more needs to be done to ensure the safety of citizens. A lot of American citizens depend on seafood to provide for their daily needs and therefore if such radiation were to affect their means of livelihood, the blame would lie entirely on the government for failing to react early enough to an anticipated occurrence. Americans also enjoy water-base activities such as surfing and there is a general fear among the citizens that spending large amounts of time in the water may affect them in some way. These claims are further confirmed by reports that South Korea has already taken action by banning all fish imports from Japan (Adelman).

There are concerns that the levels of radioactive material being released into the ocean from Japan, even years after the Fukushima disaster occurred. According to TEPCO, as much as 300 tons of contaminated water that seep into the ground finds their way to the ocean every day. This is no small number and the fact that this is continuing to this day displays a problem. Is the Japanese government not doing enough to prevent the contamination of ocean water three years after the disaster? The effects of such prolonged exposure may be worse than originally feared. An example is Strontium-90, which mimics the chemical structure of calcium. Its exposure to fish for a long time causes it to attach itself to the bones of the fish, posing an increased risk of consumption by humans and with more adverse effects.

There is a concern therefore that the United States government is not treating the issue with the seriousness it deserves. No tangible action is being seen to be taken to ensure that the waters are being tested for any signs of radioactive materials and there seems to be no action plan if such an eventuality were to occur. No active testing of the waters along the coast of the Pacific is being done to confirm the expectations of the reaching of the residue during the course of the year, for example during the Hawaiian and US coasts, both east and west. At the very least, the seafood should be tested for any contamination and these results released to the citizens.

Despite all these concerns and considerations, there is expected to be no further action unless the citizens demand it from the government. One's personal health is the most valuable thing one can possess. It is therefore the responsibility of the citizens to demand that the government does not take their personal health for granted. The assurances being bandied about by the government do not seem to be taking into concern the potential health effects that may be taken into consideration if the radiation levels were to reach unexpected levels. Any anticipated exposure to radioactivity, no matter the extent, should be treated with the utmost care possible and all angles considered, enabling the combating of any unwarranted outbreaks. This is also to ensure preparedness in the health sector to deal with such cases if they indeed come to happen ("WHO | Health Risk Assessment from the Nuclear Accident after the 2011 Great East Japan Earthquake and Tsunami, Based on a Preliminary Dose Estimation", 22).

Taking all these facts into consideration, it is important for the American people to take their government to task relating to the issues regarding radiation and its potential effects, first regarding their own personal health and second regarding their livelihood and sources of income. This is because even if the threat were to be minimal now, it would eventually reach an

unsustainable point in future and an action plan would have to be formulated for when it does reach that level. In addition, Americans also rely on seafood for personal consumption as well as for commercial purposes as an economic activity. This section of the population should also lobby the government to provide a lasting solution to the problem of dwindling food supply which would accompany tough economic times due to a loss of their source of income due to radiation effects. It is the responsibility of the government to oversee the well-being of its citizens and this should be assured to the citizens.

Though some critics may be of the view that the levels of radioactive substances may not have reached levels harmful to marine or human life, this does not eliminate the need for a solid government plan to address the issue. As has been seen before from the Fukushima disaster, unexpected events do occur and it is up to the government through the relevant bodies to take stock of the situation and prepare for the unexpected since it will eventually occur, whether imminently or later on.

In conclusion, where the government fails to take care of the needs of its citizens, it is considered to be a failed state. Citizens should wake up and ensure that they do not suffer as a result of anticipated and predictable circumstances. Over to you, citizens of America to decide your fate.

Works Cited

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