## **Atomic Balm Part 1**

## Prime Minister Abe Uses The Tokyo Olympics As Snake Oil Cure For The Fukushima Daiichi Nuclear Meltdowns

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https://www.fairewinds.org/...

As we prepare for the eighth remembrance of the March 11, 2011 earthquake, tsunami and triple meltdowns at Fukushima Daiichi, Fairewinds is ever mindful of what is currently happening in Japan.

There has never been a roadmap for Japan to extricate itself from the radioactive multi-headed serpentine Hydra curse that has been created in an underfunded, unsuccessful attempt to clean-up the ongoing spread of migrating radioactivity from Fukushima. Rather than focus its attention on mitigating the radioactive exposure to Japan's civilians, the government of Japan has sought instead to redirect world attention to the 2020 Olympics scheduled to take place in Tokyo.

Truthfully, a situation as overwhelming as Fukushima can exist in every location in the world that uses nuclear power to produce electricity. The triple meltdowns at Fukushima Daiichi are the worst industrial catastrophe that humankind has ever created.

Prior to Fukushima, the atomic power industry never envisioned a disaster of this magnitude anywhere in the world. Worldwide, the proponents and operators of nuclear power plants still are not taking adequate steps to protect against disasters of the magnitude of Fukushima!

Parts of Japan are being permanently destroyed by the migrating radioactivity that has been ignored, not removed, and subsequent ocean and land contamination is expanding and destroying once pristine farmlands and villages. For reference in the US and other countries, Fukushima Prefecture is approximately the size of the State of Connecticut. Think about it, how would an entire State – its woods, rivers, and valleys, eradicate radioactive contamination?

Let's begin with the reactors and site itself. There was a triple meltdown in 2011, yet Tokyo Electric banned the use of the word "meltdown" in any of its communications with Japanese civilians. Now we know that in the first week after the tsunami, each molten radioactive core melted through its sixinch-thick steel reactor, burned and chemically reacted with the concrete underneath, and all are now lying in direct contact with groundwater. Aside from a few grainy pictures of those cores showing burn holes in the reactors, nothing has been done to remove the cores and to prevent further contamination of the groundwater. I have witnessed schemes including a mining operation to bore under the reactors and an underground train to collect the molten masses, but those schemes are decades from fruition. The government of Japan claims that the Fukushima site will be entirely cleaned and decommissioned in less than forty years, a date that will definitely slip AFTER the 2020 Tokyo Olympics are held, and one that is scientifically impossible since some radioactive isotopes will be spread across the Fukushima site and surrounding landscape for 300 years and others for 250,000 vears.

Fukushima's radioactive reactor cores have been in direct contact with groundwater for the last eight years, and then that *highly toxic radioactive water* enters the Pacific Ocean.

When the disaster struck TEPCO wanted to build an ice-wall to prevent the spread of the contamination, which I knew would fail. *I advocated immediately surrounding the reactors with a trench filled with zeolite*, a chemical used to absorb radiation at other atomic facilities.

"The problem with freezing the soil is that as soon as you get an earthquake, you lose power and then your ice turns to mush and you're stuck." Gundersen, who has visited the Fukushima power plant in the past, said a better solution would be to dig a two-meter wide trench down to bedrock level and fill it with a material called zeolite: a volcanic material that comes from Mother Nature.

"It's incredibly good at filtering radioactive isotopes. So whatever is inside the fence will stay inside and whatever is outside the fence would be clean," said Gundersen, who estimates the price tag for such a project would be around \$10 billion.

TEPCO's ice wall has not eliminated radiation from spreading via groundwater. How will Fukushima's owner TEPCO and the government of Japan successfully clean and mitigate the damage caused by the three atomic reactors that each lost their fuel to a meltdown? These problems were never anticipated in Japan where these reactors were built and operated or in the United States where the Fukushima nuclear plants were engineered and designed and the parts were manufactured.

Since the meltdowns in 2011, Fairewinds notified the world that the recovery plans for the proposed cleanup would be almost untenable, calling it a 'long slog'. From the very beginning, I made it clear that "the nuclear disaster is underfunded and lacks transparency, causing the public to remain in the dark." Sadly, eight years later, nothing has changed.

In February 2012 when I spoke to the press at the Tokyo Foreign Correspondents Press Club, the government's recovery from the radiation released by Fukushima has never been about protecting the people of Japan. It was clear in the immediate aftermath of the world's largest atomic power disaster and still today, the government of Japan is focused on protecting the financial interests of the nuclear power corporations in Japan so they may build new reactors as well as continue to operate the old ones. Clearly, the steps taken by the government of Japan shows that the survival of the electric generating corporations like Hitachi, Toshiba, Tokyo Electric and others are more important to the Abe Government that the survival of 160,000 evacuees and the future of the food supply emanating from Japan's agriculture and aquaculture.

Evacuees in Japan are being forced to move back to their community and their homes that remain radioactively contaminated by the Fukushima Daiichi detonations and meltdowns. The government of Japan and the alleged global regulator, the International Atomic Energy Agency (IAEA) – which was chartered by the United Nations (UN) to both promote and regulate atomic power generation – have raised the allowable public radiation level more than 20-times what it originally was rather than return to land to the condition it once was.

An exposé released in early February 2019 in The Washington Post said that,

For six years, Namie was deemed unsafe after a multiple-reactor meltdown at the Fukushima Daiichi Nuclear Power Plant following a 2011 earthquake and tsunami. In March 2017, the government lifted its *evacuation order* for the center of Namie. But hardly anyone has ventured back. Its people are scattered and divided. Families are split. The sense

of community is coming apart...

As we at Fairewinds Energy Education have repeatedly said since the tragic 2011 meltdowns, understanding why the fate of the 160,000 evacuees from the toxic Fukushima landscape does not matter to the government of Japan, one must simply follow the money trail back to the corporations producing Japan's electricity. As Fairewinds has noted from its personal experience, and what *The Washington Post* and the people of Japan clearly understand is that these meltdown refugees are simply pawns in a much bigger issue of money and politics. *According to The Washington Post article*,

For the people of Namie and other towns near the Fukushima plant, the pain is sharpened by the way the Japanese government is trying to move beyond the tragedy, to use the 2020 Tokyo Olympics as a symbol of hope and recovery, a sign that life can return to normal after a disaster of this magnitude.... Its charm offensive is also tied up with efforts to restart the country's nuclear-power industry, one of the world's most extensive networks of atomic power generation. [Emphasis Added].

Six Olympic softball games and a baseball game will be staged in Fukushima, the prefecture's bustling and radiation-free capital city, and the Olympic torch relay will start from here.

To determine whether or not Olympic athletes might be affected by fallout emanating from the disaster site, Dr. Marco Kaltofen and I were sponsored by Fairewinds Energy Education to look at Olympic venues during the fall of 2017. We took simple dirt and dust samples along the Olympic torch route as well as inside Fukushima's Olympic stadium and as far away as Tokyo. When the Olympic torch route and Olympic stadium samples were tested, we found <a href="mailto:samples of dirt">samples of dirt in Fukushima's Olympic Baseball Stadium that were highly radioactive, registering 6,000 Bq/kg of Cesium, which is 3,000 times more radioactive than dirt in the US. We also found that simple parking lot radiation levels were 50-times higher there than here in the US.

Thirty of the dirt and fine dust samples that I took on my last two trips to Japan in February and March 2016 and September 2017 were analyzed at WPI (Worchester Polytechnic Institute. The WPI laboratory analysis are detailed in the report entitled: *Measuring Radioactivity in Soil and Dust Samples from Japan, T. Pham, S. Franca and S. Nguyen, Worchester Polytechnic Institute,* which found that:

With the upcoming XXXII Olympiad in 2020 hosted by Japan, it is necessary to look into the radioactivity of Olympic venues as well as tourist attractions in the host cities... Since thousands of athletes and millions of visitors are travelling to Japan for the Olympics, there has been widespread concern from the international community about radiation exposure. Therefore, it is important to investigate the extent of radioactive fallout from the Fukushima Dai-ichi incident...

The measured results showed a much higher activity of Cesium-137 in the proposed torch route compared to other areas. Overall, the further away from the Fukushima Dai-ichi Nuclear Power Plant, the lower the radioactivity. The activity of Cesium-137 in Tokyo, the furthest site from the plant, was the lowest when compared to the other sites. Therefore, the activity of Cesium-137 in Tokyo sample was used as the baseline to qualitatively estimate the human exposure to radiation.

.... At the Azuma Sports Park, the soil and dust samples yielded a range of 78.1 Bq/kg to 6176.0 Bq/kg. This particular Olympic venue is around 90 km from the Nuclear Power Plant. The other sites that are closer to the Nuclear Power

Plant like the tourist route, proposed torch route, and non-Olympic samples have higher amounts due to the close proximity to ground zero of the disaster.

... the proposed torch route samples had the highest mean radioactivity due to their close proximity to the plant. Based on the measurement, we estimated qualitatively that the radiation exposure of people living near the Azuma Sports Park area was 20.7 times higher than that of people living in Tokyo. The main tourist and proposed torch routes had radiation exposure of 24.6 and 60.6 times higher, respectively, than in Tokyo.... Olympic officials should consider using the results of this project to decide whether the radioactivity level at the proposed torch route and the Olympic venues are within acceptable level.

On a more personal note, I witnessed first-hand the ongoing radioactive devastation in and around the Namie area like that detailed in *The Washington Post's* revealing and factual essay. During the two weeks I spent in and around Namie in September 2017 I took six short videos showing what the devastation looks and feels like up close. These short iPhone videos total less than 5-minutes of run time. I was on my own, without a videographer, so these short films probably lack the professional quality viewers may usually associate with Fairewinds, however, they do convey the very palpable feeling of gloom and emptiness pervading the *ghost towns* I visited. I am sharing the first three short videos in today's blog. We will be releasing a Part 2 of this Fukushima update, which will feature another three short films.

Longtime Friends of Fairewinds may remember that back in 2011, Prime Minister Noda (he was between the ousted Prime Minister Naoto Kan, who was PM when the Fukushima Meltdowns occurred and today's Prime Minister Abe), claimed that the three melted down Fukushima reactors were in 'cold shutdown', which they were not, in order to lay the groundwork for Japan's Olympic bid. Noda claimed "... we can consider the accident contained". Fairewinds compared Noda's "cold shutdown" hypocrisy to former President George Bush crowing about "Mission Accomplished" in Iraq. Sadly, what we said in 2011 still rings true today:

Is the Japanese government and the IAEA protecting the nuclear industry and not the people of Japan by claiming that Fukushima is stable when it is not? Fairewinds' chief engineer Arnie Gundersen outlines major inconsistencies and double-speak by the IAEA, Japanese Government, and TEPCO claiming that the Fukushima accident is over. Dynamic versus static equilibrium, escalated dose exposures to the Japanese children and nuclear workers, and the blending of radioactive materials with non-contaminated material and spreading this contaminated ash throughout Japan are only a small part of this ongoing nuclear tragedy.

Later in 2013, Japan pressed the International Olympic Committee and bribed some of its members to accept the Olympics in 2020 according to an *Associated Press article February 18, 2019 by Journalist Haruka Nuga*.

Members of the JOC executive board are up for re-election this summer. There is speculation Takeda...[ Japanese Olympic Committee President Tsunekazu Takeda, who is being investigated for his part in an alleged bribery scandal] will not run, or could be replaced. French investigators believe he may have helped Tokyo win the 2020 Olympics in a vote by the International Olympic Committee.

Takeda has been JOC president since 2001. He is also a powerful IOC member and the head of its marketing commission. He has not stepped aside from either position while the IOC's ethics committee investigates.

...French authorities suspect that about \$2 million paid by the

Tokyo bid committee — headed by Takeda — to a Singapore consulting company, Black Tidings, found its way to some IOC members in 2013 when Tokyo won the vote over bids from Istanbul and Madrid... Takeda last month acknowledged he signed off on the payments but denied corruption allegations. An internal report in 2016 by the Japanese Olympic Committee essentially cleared Takeda of wrongdoing.

**Tokyo is spending at least \$20 billion to organize the Olympics.** Games costs are difficult to track, but the city of Tokyo appears to be picking up at least half the bill.

Much of Japan's focus has been to show that the Fukushima area is safe and has recovered from a 2011 earthquake, tsunami, and the meltdowns at three nuclear reactors. [Emphasis Added]

Here is what I said in a *video on Fairewinds website in 2013*, when the original Tokyo Olympic announcement was made.

I think hosting the Olympics in 2020 is an attempt by the Japanese to change the topic. I don't think people around the world are going to care until 2020 approaches. There is a seven-year window for the Japanese government to work to make Tokyo a showcase for the entire world to view. I think the Japanese government wanted to host the Olympics to improve the morale of the people of Japan after the Fukushima Daiichi accident. Unfortunately, it's taking people's attention off of the true cost of the accident, in terms of both money and public health.

Placing the Olympics in Tokyo was and still is a ploy to minimize the consequences of the Fukushima Daiichi meltdowns and to take the public's attention away from a pressing emergency that still needs resolution for the health and safety of the people of Japan.

## Atomic Balm Part 2: The Run For Your Life Tokyo Olympics

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Edited by Maggie Gundersen

Thank you to Fairewinds' Friends, who have written and called us to share their appreciation for Fairewinds' post *Atomic Balm Part 1*, and for taking the time to read and understand our analysis of the real reasons the Summer Olympics were placed in Tokyo in 2020.

To begin Part 2, let's talk about the scientific studies that Dr. Marco Kaltofen and I began together back in 2012. Before the ongoing catastrophe created by the Fukushima meltdowns, the *maximum allowable* radiation exposure emanating from commercial atomic power reactors was 100 millirem per year (1 milli Sievert per year) to civilians worldwide. Because radiation workers receive compensation for the increased body burden they take on by working in a high radiation risk environment, workers were allowed a maximum of 5,000 millirem per year of radiation (50 milli Seiverts of 5 Rem – depending upon which term one is applying). Although that is the legal upper limit, most workers in atomic power industry actually receive approximately 2,000 millirem per year (20 milli Sieverts or 2 Rem). *According to DOE 2016 Occupational Radiation Exposure* 

Over the past 5-year period, all monitored individuals received measurable total effective dose (TED) below the 2 rem (20 mSv) TED ACL, which is well below the DOE regulatory limit of 5 rem (50 mSv) TED annually.

Since the Fukushima meltdowns, the government of Japan changed the rules by increasing the allowable amount of

radiation civilians are subjected to at 20-times higher than was previously allowed, which is almost the same as the highest dose exposure nuke workers may receive in an entire year!

A significant portion of the Olympic games, including men's baseball and women's softball and the Olympic torch run, as well as the soccer training facility, will occur on land that the government of Japan has declared to be part of a "nuclear emergency". This means that athletes and civilians will legally be exposed to *allowable* radiation levels that are 20 times higher than levels that exist at other athletic facilities on any other continent. Therefore, according to the National Academy of Science's Linear No Threshold (LNT) radiation risk assessment, the athlete's risk of radiation related maladies has also increased 20 times higher than if they stayed home.

The people living in and around the Fukushima Daiichi disaster were informed by Japan's government that they must return to their contaminated homes and villages if the radiation levels there were 2 Rem, even though they are being subjected to daily doses of radiation that is 20 times higher than any people living near any nuclear plants in Japan were ever subjected to.

Rather than completing an effective cleanup, Japan's government is forcing its evacuees to return to their allegedly clean but still highly contaminated homes if they wanted to continue to receive their financial refugee stipend. There are three fundamental problems that make the exposure to Japanese civilians much worse than the new dose limit.

The first problem is with the government of Japan's clearance criteria that only areas in and around homes have been allegedly decontaminated. I measured radiation along highways and then 50-feet into the surrounding woods, only to find that the woods remained highly contaminated, so that when it rains or snows, or the wind blows the dust or pollen from the woods, that radiation migrates back to people's supposedly clean and radiation-free homes. I went to the top of 4-story high rooftops in Minamisoma that had been completely cleaned and repainted following the meltdowns. These rooftops were recontaminated by dust on the wind, blowing in radiation from the surrounding mountains. Peoples' homes and communities that were claimed to be clean are indeed being recontaminated every day.

The second problem is that the government of Japan is measuring only one type of radiation prior to forcing the refugees to return. Only the direct radiation from cesium is being measured with handheld Geiger Counters. Such measurements are the measurement of external gamma rays that travel through the human body uniformly, much like X-rays. Dr. Marco Kaltofen and I have long noted that ingestion of small radioactive particles, called hot particles or fine radioactive dust (or nanoparticles), migrate into peoples' lungs and GI systems causing internal organs to receive heavy radiation doses for years on end. TEPCO and the government of Japan are ignoring the presence of these hot particles.

The third and final problem is that some hot particles are extraordinarily radioactive, much more so than the average hot particles. *In a peer-reviewed paper that Dr. Kaltofen and I wrote*, we detail our scientific research which proves that more than 5% of these particles are up to 10,000 times more radioactive than the average of all 300-particles we studied. Of course, this means that peoples' internal organs are constantly bombarded with extraordinarily high levels of radiation, much higher than the civilian evacuees are subjected to.

These three additional selfie-videos that I took while in Fukushima during September 2017 show what is really happening near Fukushima. We cannot forget about the magnitude of these exposures to all people in order to create an image of normalcy by Japan's hosting of the Tokyo Olympics.

The migrating radioactive dust from Fukushima has had and will continue to have a devastating effect on thousands of people who lived near the reactors and are now being forced to return as well as hundreds of thousands who reside much further away. Highly radioactive samples were found as far away and in such populous places as Tokyo. In its effort to try and restore everything to the way it was before the triple meltdowns, the government of Japan has failed to realize that Japan and in fact the world, is a much different place than it was before the Fukushima Daiichi disaster. Japan continues to force refugees to return to contaminated villages and is marketing what can only be *irradiated products from Fukushima*.

Cleaning up after a nuclear meltdown is no easy task, in fact a total clean-up is technically impossible, by slapping Band-Aids and quick fixes onto the problem instead of acknowledging the scope, severity, and root causes of the issues, the politicians and government officials of Japan and TECPO are endangering the lives of thousands of Japan's citizens in order to protect their political standing, personal financial status, and the wallets of the nuclear industry.

According to the *Asia Pacific Journal (AJP) last week, in a brilliant essay* written by University of Chicago professor Dr. Norma Field, a Robert S. Ingersoll Distinguished Service Professor in Japanese Studies in East Asian Languages and Civilizations:

We might pause over predictions that the 2020 Olympics-Paralympics may end up costing 3 trillion yen (approximately 26.4 billion USD), many times the original budget for what was promised to be the most "compact Olympics" ever. These games are often touted as the "recovery Olympics" (fukkō gorin).

It is not hard to conjure ways that these monies might have been used to benefit the entire region afflicted by the triple disaster and especially, the victims of the enduring nuclear disaster. A pittance of the Olympics budget would have sustained modest housing support for evacuees, compulsory or "voluntary." Instead, the highly restricted, arbitrarily drawn evacuation zones have been recklessly opened for return of evacuated citizens despite worrisome conditions prevailing over wide swaths of the region.

The Olympic soccer center that served TEPCO as a base for radioactively contaminated disaster workers (where they slept, donned protective gear, and were screened) has been contaminated by radioactivity yet is scheduled to be the training site for the national soccer team.

In *Dr. Field's essay for APJ*, which was an introduction to a longer essay by the recently retired Kyoto University Reactor Research Institute professor: Dr. Koide Hiroaki, she wrote:

...As medical journalist Aihara Hiroko observes with not a little irony, "Surely the Tokyo Olympics will be a superb occasion for displaying 'recovery from disaster," but also for revealing to the international community the "real consequences of the human-made disaster resulting from the national nuclear energy policy: the imposition of long-term evacuation and sacrifice on the part of area residents." [Emphasis Added]

Dr. Field's introduction and Dr. Koide Hiroaki's extensive article in APJ are crushing to read, yet they do not tell the whole story. I feel it is important to expand upon the ongoing

radiation exposures that the 160,000 Fukushima refugees are still experiencing, eight years after the meltdowns. This science, that governments are hiding from people around the world, is not difficult to understand, especially if we also focus on the desire of world governments to keep alive the everintertwined nuclear power and nuclear weapons opportunities they have invested in so heavily – financially, politically, and emotionally. During my four trips to Japan, and from all the people who have written to Fairewinds from Japan since we first published our book there, I have met, spoken with, or communicated with numerous refugees from Fukushima and truly believe that Fairewinds understands their traumatic losses

While people world-wide might cheer the Tokyo Olympians, the human perspective should focus on the real victims, those who are being shoved out-of-sight.

The bottom line is that to reduce cleanup costs while spending enormous funds on the Olympics, the government of Japan treats its 160,000 Fukushima evacuees as if they were radiation Guinea Pigs, forcing them to return to recontaminated areas to try and convince the world everything is ok, meanwhile making it difficult for serious scientists to accurately assess the effects of radiation on these evacuees. The billions of dollars being spent on the Olympics would be much better used to help those displaced by the Fukushima Daiichi disaster. Help these families find permanent homes and employment and new supportive communities far away from the contaminated areas that they are now forcibly being returned to.