Joosten, Sandy

From:Ace Hoffman <rhoffman@animatedsoftware.com>Sent:Saturday, October 19, 2013 1:52 AMSubject:Two events in California tomorrow (one in San Francisco, one in San Clemente)Attachments:FukushimaIsHere-page-002.pdf; TheGreatestDangerIsNow-AceHoffman2013.pdf;
ATT00002.txt

10/18/2013

Dear Readers,

Tomorrow (Saturday, October 19th, 2013) is a busy day for Californians interested in nuclear issues!

In San Clemente there is the Citizen's Nuclear Waste Symposium. Attached is my brochure (in pdf form) for that symposium. Many thanks to Mary Fish and staff for help putting the brochure together. The symposium, featuring nuclear waste experts Arjun Makhijani and Marvin Resnikoff, will be webcast live, and also recorded for later rebroadcast. Go to SanOnofreSafety.org for more information about the San Clemente symposium.

Also tomorrow, in San Francisco, is a Fukushima Awareness conference, and more information on that is included below and in the second attached pdf. Speakers will include Dr. Robert Gould (Physicians for Social Responsibility) and Prof. Masaki Shimoji, who was jailed in Japan for protesting the burning of radioactive Fukushima rubbish.

I heard from a San Onofre whistleblower today, who told me he has learned that Unit 3 operated at higher pressures than Unit 2 -- the opposite of what we had thought! He also said the boiling in Unit 3 began at the very bottom of the steam generator, near the tube sheet (much lower than it should have). He noted that even today, he doesn't think anybody really knows why Unit 3 suffered Fluid Elastic Instability, and Unit 2 did not.

Ace Hoffman Carlsbad, CA

The Truth and Reality of Fukushima / an Educational Conference:

Date and Time: Saturday October 19, 2013 2:00 PM - 6:00 PM Place: San Francisco State University, Room BH1, 1600 Holloway Ave. SF 94132

Admission: Free

Japan and the world continue to be threatened by the Fukushima meltdown and further contamination of the land and sea as well as a growing cancer epidemic of children, workers and the people of Japan.

The conference will challenge the information being propagated that we can overcome radiation and that Fukushima can be decontaminated.

Initial Speakers:

Dr. Robert Gould - Physicians for Social Responsibility, An expert on the medical effects of radiation

Prof. Masaki Shimoji - Assistant Professor of Osaka Japan, Anti-nuclear activist in Osaka Japan who was imprisoned for organizing against the burning of nuclear rubble in Osaka

Possible speaker by Skype: Taro Yamamoto - Member of Parliament from Tokyo

Film: How Nuclear Power Was Brought To Japan

Music: Okinawan music

A link is available here: http://nonukesaction.wordpress.com/

Kirk Sorensen talking about spent fuel (2010):

Kirk Sorensen talking about his spent fuel simulation at a Google tech talk in 2010. At the end of the talk Sorensen promotes spent fuel reprocessing, which I don't agree with, but nevertheless this is an excellent primer on the composition of spent fuel (about 20 minutes):

http://youtu.be/rv-mFSoZOkE

This newsletter written by:

FUKUSHIMA IS HERE its radiation is in our air, our soil, and our ocean, Mother of all life



WE ARE HERE to tell the world that we, and the ocean, are not going down-not without a fight

In March 2011 three reactors at the Fukushima Nuclear Station melted down completely, the location of their molten cores is a mystery. For 2.5 years they've been flooding the Pacific with contaminated water and the jetstream with radioactive particles. There's been no attempt to contain the disaster, only day to day crisis management, more and more water poured into the reactors, only to leak out into the ocean. Tepco's actions have only made things worse; their underground walls to retain the water are turning the ground into a swamp, increasing the chance of a building collapse, and another meltdown in a spent fuel pool. We need to stand up and demand that our leaders act in concert to save our ocean from total destruction, and stabilize the site before it's too late. Without an international effort, at the very least, all marine life will be damaged by Tritium and other highly lethal radioisotopes.

BE HERE with us, at Ocean Beach in San Francisco, October 19, 2013 from 11 AM to 12, to create a human mural with our bodies, spelling "FUKUSHIMA IS HERE"

Go to http://fukushimaishere.info to sign up/rsvp; and check in with John Bertucci at the beach. Bring water and a warm coat, just in case. Go to http://fukushimaresponsebayarea.org for more Fukushima information.

No Nukes Action hosts a Fukushima Conference later that day, 2 - 6 pm, at SFSU, 1600 Holloway St. Room BH1 FREE! Special guests from Japan! Details: nonukesaction.wordpress.com

Nuclear Waste: The greatest danger is now!

Spent fuel is hot stuff. It's thermally hot - about 400 degrees Fahrenheit. That's not residual heat from when the fuel was in the reactor, it's decay heat from fission products with short half-lives (from days or weeks to about 30 years for most isotopes of iodine, cesium, strontium, etc.).

REACTOR FUEL ASSEMBL





Expanded and cracked fuel pellet after being irradiated in the reactor for 3 to 5 years.

The average composition of U.S. spent fuel

Model of one fuel pellet



TBq/mt HM

Activity of spent fuel through time



Sagging tubes with fused pellets cause all the force of the pellets to be carried by the narrow areas between the pellets.



High burnup fuel is known to fuse tightly to the zirconium cladding.



San Onofre dry cask storage system







Figure 2-15. Nuclear Weapon and Nuclear Facility Gamma-Ray Dose Rate versus Time after Detonation and Shutdown Source: Ramberg

If spent fuel is transported, the transport containers are inadequate beyond design parameters. The primary issue the world should be grasping is that spent fuel is vastly more dangerous when it's first made than later -- and it's still dangerous later. So making it at all is the biggest mistake in spent fuel handling!

Half-Lives of Radionuclides in Body Organs

After ~ 10 years, about 1% of the original amount of radioactivity that was occurring the day the fuel was removed from the reactor is still occurring.

After ~ 100 years, about 1/10 of the 10-year amount of radioactivity will still be occurring. The rate of decline in radioactivity has slowed considerably.

After ~1000 years, radioactivity will have dropped to about 1/10th of the 100-year amount. Most of the original fission products have decayed to stable elements, but the decline of radioactivity is no longer very rapid and the spent fuel is still very hazardous, mainly from plutonium and its daughter products.

Transport cask test event scenarios



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The impact (free drop and puncture), fire, and waterimmersion test are considered in sequence to determine their cumulative effects on a given package. These tests are insufficient for real world potential events during transport.

Radionuclide	Radiation	Critical Organ	Half-Life		
			Physical	Biological	Effective
Iodine-131	Beta	Thyroid	8 days	138 days	7.6 days
Strontium-90	Beta	Bone	28 years	50 years	18 years
Cesium-137	Gamma	Whole body	30 years	70 days	70 days
Plutonium-239	Alpha	Bone	24,400 years	200 years	198 years
		Lung	24,400 years.	500 days	500 days

Source: U.S. Atomic Energy Commission, The Safety of Nuclear Power Reactors and Related Facilities WASH 1250 (Washington, D.C.: U.S. Atomic Energy Commission, July 1973), p. 4-23. Source: Ramberg