1 (6 PAGES TOTAL) BS09 B. Deck COPY FOR THE N.R. C. RECORD. 62 FR 736 Jan 6, 1897 B. Deck Pamela Blockey-O'Brien D23 Goiden Valley TOI 7631 Dallas Hwy. Douglasville, GA 30134-3766 U.S. EPA Air and Radiation Docket, Mailstop 6102, Air Docket No. A-96-44. Room M 1500, RECEIVED First Floor Naterside Mail. 401 M Street SN, Washington, D.C. 20460 Chief,

Ruise Review and Directives Branch, Division of Freedom of Information and Publications Services, U.S. NRC. Washington DC 20555-0001

Re: Multi-Agency Radiation Strvey and Site Investigation Manual (MARSSIM) Draft.

COMMENTS FOR THE RECORD : FROM PAMELA BLACKEY-O'BRIEN (Messeber I.F.O.R.)

The most distressing aspect of this report, is that obviously a lot of good people spent three years on this report, yet do not seem to understand what the history of radiation is, what the medical, biological and ecological consequences are , and do not sees to have consulted with those who have been part of the history, and use, of radioactivity since the dawn of the atomic age, who are alive still today, who could provide great insight into the problem. Furthermore, the Agencies represented in MARSSIM, NRC, DOE, DOD, EPA -, wave terrible track records , and both DOD and DOE bear responsibility for some of the most contaminated sites on the planet, besides still push all things nuclear. The NRC almost never met a licensee it didn't love, and the SPA has just finishing dumping thousands of contaminated sites off it's lists-one way or the other-because it couldn't be bothered to go after the polluters who are usually lioted in the files, and will be allowining cursory cleanup at these sites, which will then be released back to public use. Sort of what is about to happen have. RPA's little disgusting program is called "brownfields" and Al Gore is skipping around the country chanting a "brownfields to gravafields" manura that is making people in the real world, (those who have been affected by theses sites,) ready to stick his head in a "brownfield" and stick the head of the EPA in with him. These Agencies genegrally have absolutely no understanding of natural ecceystems , although individuals within the agencies may well understand them but are ignored, and the consequence is what is about to happen if MARSEIM is implemented as it stands - namely major mistakes are made which load to long term catastrophic problems. MARSSIN will not work in the real world.

In the real world, contractors often hire semi-literate subcontractors who do a terrible job, or they themselves do a terrible job. EPA is good at allowing companies with repeated violations, fines etc. to be brought in to "closn-up" sites. One EPA staffer left , calling EPA a wholly owned subsidiary of the garbage companies, according to documents. In the real world site assessors often do quick "drive bys", and site assessments are filled with words like; "unknown", "don't know" because they were to lasy to go and find out what entire communities could have told them. I know this because I have read enough of them dowe at what turned ast to be superfund cleanup sites , or seriously contaminated sites. The Hazard Ranking System is outrageous , and allows lower scores if only a few people are around it. Because people don't count in the real world. Meither do all other life forms.

When, on page 1-8 line\_s 202-208 it says the DOB is consisted to protecting the enviromment, I could only think of its thousands of contaminated sites and bases, themselvas requiring an estimated \$100 Billion to \$200 Billion to cleanup worldwide , and

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the fact that the so-called military "leaders" of the world, including of the U.S. armed services, still do not seem to grasp what nuclear weapons , radiation and nuclear war would do, or unleash, because they are still prepared to use them. The words of the former Admiral of the Fleet, The Earl Mountbatten of Burma, Lord Louis Mountbatten - the former Supreme Allied Commander in South East Asia (1943) tho saild on May 11th, 1979 "In the event of nuclear war, there will be no chances, there will be no survivors, all will be oblitarated ... such a war would not drag on for years, it could be over in a matter of days. And when it is all over, what will the world be like ? OUr fine great buildings, our homes will exist no more. The thousands of years it took to develop our civilizations will have been in vain. Our works of art will be lost, radio television, newspapers will disappear. There will be no means of transport. There will be no hospitals. No help can be expected for the few mutilated survivors in any town to be sent from a neighboring town - there will be no neighboring towns left, no neighbors, there will be no help, there will be no hope," - these words have been ignored, as have the consequences of "Global nuclear winter" following even fairly limited exchanges (See Dr. Carl Sagans' studies, with others, on this issue) of nuclear weapons, as have the words of others (myself included) as has that monumental work by JONOTHAN SCHELL, "THE FATE OF THE EARTH" (ISBN. 0-380-61325-5) - all Ignored. Schells work should be required reading , not only for all military personell worldwide , and those working on MARSSIM, but in particular all at the D.OE. AND D.O.D.

The D.O.E. (and its global counterparts in other nations) could make the biggest contribution to the entire effort, by CEASING IMMEDIATELY TO CONTINUE TRASHING THIS CREAT MATICN VIA ITS NUCLEAR PROGRAMS, and D.O.E. knows what I'm talking about. What is the point of MARSSIM and "cleanup" if one of the agencies is bound and determined to shove further radioactive pollution down the nations collective throat by insane, disasterous programs and policies - such as re-processing and the like ?

In the Introduction (p.1-4 line 67-86) MARSSIM does not address all sorts of things, from vicinity proparties through contaminated subsurface soil, water construction materials etc., this must be addressed. All the aforementioned become contaminated to some degree. THE ONLY RELEASE CRITERIA FOR ALL SITES SHOULD BE A RETURN TO THE NATURAL BACKGROUND LEVELE OF AN AREA PRIOR TO THE ADVENT OF THE NUCLEAR TESTING AGE, FOR AVERYTHING ON ,AROUND AND BELOW A SITE. AS THIS CANNOT BE DONE IN COUNTLESS INCIDENCES, THE MAXIMUM POSSIBLE CLEANUP SHOULD BE DONE, AND THEN THE SITE SEALED AND FENCED AND EXCLUSION ZONES BE REQUIRED ALL AROUND THE SITE. PROPERTY DEEDS SHOULD BE MARKED TO WARN PEOPLE AWAY. THE DEATHS HEAD SYMBOL SHOULD BE PROMINENTLY DISPLAYED ALSO AND THE WORDS, "DAMSER, RADIATION, KEEP OUT FOREVER".

Before the authors of MARSSIM proceed, they should first read pages : through 168 of Dr. Rosalie Bartells award winning work "NO DAMEDIATE DAMSER -PROCENDSIS FOR A RADIOACTIVE (ISEN 0-913990-25-2 , bookstores can order it from the publisher.) She wrote EARTH" it about 12 years ago and should be called in as a constitant to MARSSIM as she is one of the worlds great experts on health effects etc. who is independant. She can be reached at the International Institute of Concern for Public Health in Canada Fax: 1-416-260-3404. Without someone like her involved, the public health and the environment will not be protected. MARSSIM is using the archaic so-called "protection" standards, that never did mean "safe", and have been consistently applied to allow the nuclear nightmare to operate. MARSSIM should consult with people like Dr. Joh Gofman, former medical director of Lawrence Livermore and co-discoverer of the fissionability of U-2?3 , we at least some of the testimonies of Dr. Karl Z. Morgan (such as his and Attachments in "Volume II, Final EIS, Contestimony and Sopendixes tinued Operation of K.L. and P Reactors, Savannah River Site. Aiken SC Dec. 1990, DOE". Pages C-601 through C-673 also include cleanup information and medical effects that

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MARSSIM could perhaps extrapolate for use. Dr. Morgan was nearly 30 years at Oak Ridge (until his criticisms of appalling standards etc. concerning radiation "protection" got a lot more vocal.) He is considered the "Father" of the Radiological Health Physics proffession, but in later years became a severe critic of what was going on.

In order to understand what I mean about getting enough background information on a site, you should all read the testimony of Ms. Sus Jane Johnson (p.C-750 to C-753 ) in the aforementioned EIS on ERS. . (You could read my testimony in there too!) Ms. Johnsons testimony is horrifying on the extent of the problems. In the case of Government facilities, citizens comments should be read for clues as to the extent of contamination - comments from any hearings that were held. ALSO OND NEWS REPORTS.

Another mistake MARSSIM makes, is to consider "time and cost" Morongly ((4-4, line 79,80,81.) If a lot of time is spent resessing and measuring and sampling a site, in the end costs will be <u>saved</u>. I would suggest a minimum of three months be spent just on historical, geological background. If this is not done in detail, that will happen is that in some cases you will suddenly find that the situation is far more dangerous and widespread. This could occur in the middle of a cleanup and andanger workers and surgeounding community. Speaking of surrounding communities.: they should be evacuated from the area (at least 1/2 mile radius) during any demolition, soil disturbing or other dust generating activities due, to airborne contamination.

MARSSIM should not "average" - do NOT take "background" measurements on the site (see see my prior comment on this) for example (4-12 whole page) HAS E.P.A. FORGOTTEN TO TELL YOU, THAT SEMAGE SLUDGE CONTAINS EVERYTHING FROM LEAD TO RADIOACTIVE CONTAMINANTS (FROM SEMER DUMPING BY LABS AND REACTORS) IT IS THEN INCINERATED, THE RESULTING ASHES ARE THEN SOLD TO CEMENT AND ERICK COMPANILS TO MANOFACTURE BRICKS AND CEMENT WITH, HENCE CEMENT OFTEN HAS A HIGHER LEVEL OF RADIATION. ONE OF THOSE CUTE REGULATORY LOOFHOLES. CEMENT (AND ASPHALT PLANTS) CAN BUEN SUCH WASTES AND WITHOUT GOING INTO DETAILS THAT LEADS TO A WHOLE OTHER SET OF PROBLEMS. Are MARSSIM authors aware that after start-up, the yearly increases in radiation from nuclear plants and other facilities are added to "background" so in the end a "background" level is created that bears no resemblance to the original natural background radiation level ? All this must be considered.

All sites should be considered Class I or Class II sites. Forget about Class 3, MARSSIM can safely assume (and I am not one for assumptions) that wherever radioactive materials were in use etc. there is contamination. For example, one idiot that was a scientist at Georgia Techs decrepit, contaminated reactor and site, years ago, over in his lab, which was in another building, used to stuff contaminated rags and such into a hole he had bashed in the wall because he couldn't be bothered to dispose of them properly.

I am very concerned that there does not seem to have been detailed input from biologists who specialize in the redical effects of radiation, or pediatric toxicologists specializing in the same thing. Or comments from agencies such as U.S. Fish and Wildlife Service. The effects to the most vulmerable should have been included. I am concerned that radioactive "daughter" products which may have very different physical, chemical and radioactive properties from the parent " do not seem to have been addressed while looking at cleanup . Biological toxicity should be afactor for everything found at a site. I am concerned that levels considered "allowable" have more to do with money than health or the environment. Having read one of NRCs (Jan. 1993) Decommissioning case studies and papers on some fools wanting to allow the recycling of contaminated metals into public use, I am constantly outraged by the ignorance and total lack of common sense that seems to creep into these real world

scenarios which future generations are going to have to die by. I say "DIE" because

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that will undoubtedly be the case. I am concerned because countless people in various agencies, including dectors, truly seem to believe that there is a safe level of ionizing radiation - radiation, period - when there is none, and that fact has been known for years and which indeed even NRC admitted to in writing to Dr. Gofman in the late 1970's ( after mentioning that he knew more about it than they). I am concerned because many States which are Agreemant States, which would presumeably have some oversight in the process have pretty pathetic radiation protection programs as it is, often underfunded, understaffed and , in the case of Georgia for example, not a doctor who specializes in the medical effects of radiation in sight, as part of their program. Like the MARSSIM - a lot of technical graphs, figures, charts, , but no deep understanding of the effects. A lot of clinging to "risk assessments" "average mamber of the critical population group" "reasonably maximally exposed member of the public" (1-1) sort of wording (I-I) line 20-21 shows a lack of understanding of the groundwater cycle, groundwater is used by countless communities, groundwater eventually is released to surface and other water bodies, eventually it will be used, drunk, swum in. Effects to micro-organisms are not considered, let alone aquatic species.

I am appalled and outraged that ALARA (read "planned deaths) again will be used instead of ALAHP (As Low AS Huranely Possible) , and I am saddened that we are still dealing with rules and regulations having basis in the Atomic Energy Act, and the Atomic Energy Commission, and their original awful ideas and issueing of licenses based on the rules governing the licensing of radios in the 1930's. (See " Meltdown- the Secret Papers of the Atomic Energy Commission" by Prof. Daniel Ford.) The fact of the matter is, that unlike the so-called "release criterion" 2-2 : line 49 On, which only looks at dose and cancer, the effects of radiation are far more complex, and include everything from depression of the immune system, to starility, reproductive problems, heart problems, thyroid problems and a host of other effects which are not addressed by standard setters, agencies, and MARSSIM. The most serious is bluntly stated in the beginning of Chapter Two of the BEIR V Report : IONIZING RADIATION DAMAGES THE GENETIC MATERIAL IN REPRODUCTIVE CELLS AND RESULTS IN MUTATIONS THAT ARE TRANSMITTED FROM GENERATION TO GENERATION.", (How many MARSSIM preparers have actually read it ?) In 1943, Herman Muller won the Nobel Prize for his work on the genetic effects of radiation. In 1964 he published a paper "Radiation and Heredity" (American Journal of Public Health Vol.54, No.1 pp42-50 - source, Dr. Bertell) Which all MARSSIM preparers should also read. Dr. Karl Morgan was a friend of Millers and because he remembers the geneticists warnings about undermining the nations health and childrens health, Dr. Morgan has constantly spoken out courageously against exposure to the public and to workers, and has been appalled at some of the things done in the name of pushing all things nuclear. I do not know the ages of the MARSSIM preparers or those who had input, but I doubt many were part of the great early debates on radiation, health, nuclear testing, I doubt they had to listen to the type of garbage Dr. Gofman had to put up with. He was the star scientist for the Atomic Energy Commission, a former me or of the Manhatten project, before the whole enterprise was moved to Los Alamos, - yet when he laid out that the data showed cancer hazards resulting from radiation to be 20 times worse than anyone had ever expected, and in testifying before Senator Muskies hearings gave his expanded version, entitled "Federal Radiation Cancer Guidelines: Protection or Disaster ? " he and fellow sciencist Arthur Tamplin, had to ondure Chet Holifield, Chairman of the Joint Committee on Atomic Energy, which oversaw the Atomic Energy COmmission, end his tirade against Gofman by saying : "Listen, there have been a lot of guys before you two who've tried to interfere with the AEC program. We got them and we'll get you." (" The Plowboy Interview with DA John Gofman in the Mothar Earth News, March/April 1981" http://www.ratical.com/radiation/CNR/ PlowboyIntrv.html ) Guess which respected scientist (selected by the American College of Cardiology as one of the 25 leading heart disease researchers of the last quarter century) not only got messed over by the AEC/NRC, but turned out to be right all along ?

Dr. Gofman of course.

What I am trying to get across is this: MARSSIM will be responsible for one of the most crucial set of docisions affecting generations as yet unborn, probably ever written - and it is simply not good enough by far and does not address a tenth of what it should. This is not to say that parts of it are not well done, but the lack of input from non-agancy or non-miliary scientists, doctors, environmentalists, concerned citizens with great experience in this field, are a very, very serious Furthermore, the issues are so serious, so complex, that cleanup cannot flaw. be just dished out to any contractor. I believe there should be federal and state oversight, as well as impartial oversight, of every single site from beginning to end and in between. The manual cannot be understood by your basic contractors at all. Even many who clean-up sites don't understand the half of what they are dealing with. Cleanup of these sites is a job for experts , and if they are not available, heaven help us. At a minimum, there should be a requirement that the contractors for smaller sites hire the type of staff needed, plus a radiation biologist. For the larger sites it may require using the military as they do have trained units, coupled with contractors and independant oversight. The U.S.G.S. and U.S. FISH and Wildlife should be involved at all sites too. As well as toxicologists, radiological health people and the like. Congress is going to need to cough up on some of the funding, and the past/present users of the site also MUST be required to pay up.

I would suggest MARSSIM be put out for much broader review and input from outside all agencies/military listed for starters. I heard about it by accident. (Bet you all wish I hadn'T) It should also be sent for review to foreign independant researchers in the medical/biological field, as US standards are often adopted worldwide. If they have not already been sent a copy to comment on, the Union of Concerned Scientists should be sent a copy, as well as Physicians for Social Responsibility and U.S. Fish and Wildlife. Dr. Alice Stewart should be sent a copy. As well as all those mentioned herein. Then, when all is said and done, the language in MARSSIM will need to be simplified. It should also contain a chapter on the REAL dangers and effects of radiation and protective gear needed for all workers. Last but not least - no throwing this crud into the local landfill of note, or dumping it down the sewers or burial at sea....Been there, done that, created half the current problem.

I expect that preparers aquire and read what I have cited herein. It will not only be an eye openar, but contains useful information that can be used. A last source of information, are the NRC printouts on facilities, including petitions and listings of accidents and contamination. One of the most awful sites is run by an outfit that had a representative at one of your meetings - Nuclear Fuel Services up in Erwin, Tennessee. They were the jerks that left the mess at West Valley and no one made them clean that up. See what I mean ? What has happened up at Erwin TN is an example of finding out the details (some of them) by using the printouts of that docket. If you read it, you will see how the "cover-dip and do nothing" process works. To be unpleted, NRC is, after all, funded mainly by its licensees. On the "Coverup" note : I am still waiting for the DOD to tell its soldiers that the DU projectiles and bullets they used (all sides used them) Manhorted them with radioactive and toxic "dust" .Hair fallout ? Skin rashes ? Nausea? Reproductive problems ? Sound familiar ? Wouldn't want to admit to a little radiation sickness would we now ?

Nothing in this letter should be construed as being against any of the people involved in producing Aprking on MARSSIM. It is just that you are all working to the most decietful set of "standards" and "cooked" information ever derived - it took a long time to do it, over fifty years - and it will take as long to undo the mess wo face as a result of all the deciet. First you need the truth, only then can you produce a manual on what to do, what standards should be set, how to do it all. In the meanwhile, long ago I reached the conclusion, that about the only thing that will wake up the American public, the NRC, the BOE etc. will be the day Charlston is hit with another earthquake and the whole of Savannah River Nuclear Site goes to hell completely.

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With the southeastern seaboard lost forever due to contamination, and the aquifer running under Alabama, Georgia and South Carolina contaminated, and the mid-Atlantic gone to pot and plumas spreading across the Atlantic to blanket Europe. I have a feeling that the first agency, or military, official that opens their mouth to spout the usual, "It's all allowable levels, everything is within standards set by experts, there is no immediate dangar", will wind up looking like a skink hit by a tractor-trailer rig in a matter of a second. The American people are long suffering, but when they find out they have been lied to for decades, on the radiation issue, I have a feeling a lot of people will be ready to resort to "frontier justice". For that reason alone, I think it would be a good idea to begin "easing" them into the truth and depth of the problem. It could begin with MARSSIM - and it will require the truth. As part of the cleanup effort, doctors across the country are going to have to be told about the true conse= quences of radiation exposure, and that what standards they have been working to all this time were mainly hogwash. So are all those people manning X-ray equipment, many of whom are not even certified radiologists. (Surprise !)

I will end here. There is no point in continueing. I will close with the following quote :

" We are the most bombad nation on earth" Western Shoshone Elder, Bill Rosse. In the early 1950's, the United States took a Sovereign Nation, with which it had a signed, unbroken Treaty called the "Treaty of Ruby Valley". It left the people of that Nation a little snippet to live on. From 1951 until 1992 The U.S. and Great Britain exploded 1,054 nuclear devices above and below ground on the land taken. The people left i the area are in dire condition (i.e. those who are not dead) The land was the homeland of the Western Shoshone Indians. The US Atomic Energy Commission established the bomb test site. It got called the Nevada Muclear Test Site. Today the Department of Energy is the responsible party. This is a site MARSSIM would apply to .... This is a site of 20th Century ganocide against the original inhabitants of this nation. This is a piace of death. The military, the DOE, the DOD , all tear responsibility for this, and it is all still being used. The whole area is used., it contains Twenty Nine Palms Marine Corps Base, China Lake Naval Weapons Center, Fort Irvin Military Reservation, Nellis Air Force Bombing and Gunnery Range. Now the intent is to damp the rest of the country's nuclear waste there, and also under their Sacred Mountain, Yucca Mountain.

How many who worked on MARSSIM from the military, or DOE, or NRC, knew this ? Genocide. Excluse me if I don't have a lot of trust in the outfits involved in the virtual extermination of a Nation and a People. The Navy has electronic warfare communications sites planned for the area also. Genocide. Extinction is forever.

How will MARSSIM deal with craters made by atomic bombs ? Will MARSSIM address the broken hearts and bodies of the remaining Western Shoshone Indians ? Will anyone ?

Jamela Blockey-O'Brien ( hender I.F.O.R.)

Pamela Blockey-O'Brien.

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