Petition, Complaint and Plea for Redress, directed to
The Ministry of the Environment of <SWEDEN>.
regarding
International and European Human Rights Legislation
and
Environmental Protection Laws and European and Multi National Agreements: the issue of Scientific Policy Advice on internal exposures to radioactive pollutants.
And the requirements of
The EURATOM Basic Safety Standards Directive

1. Principal Facts

1.1 In common with all major countries, the government of <SWEDEN> , democratically elected by the people of <SWEDEN> to protect *inter alia* the human rights, health and well-being people of <SWEDEN>, lays down legal limits for members of the public and workers to exposures to ionizing radiation and radionuclide contamination of the environment.

1.2 The limits laid down by statute are based upon recommendations made in the first place by a National Competent Authority, the <SSM> whose mandate it is to assess such risks and to keep abreast of the scientific evidence that the limits being recommended are scientifically sound and based on an accurate assessment of current scientific and epidemiological knowledge of the health effects of such exposures.

1.3 In Europe, member States (which includes <SWEDEN>) are subject since May 2000 to the Basic Safety Standards (BSS) Directive EURATOM 96/29 which was redrafted in 2010.

1.4 This Directive has within it the following clauses which have aspects identified in ***italic bold underline*** which are relevant to the present document:

BASIC SAFETY STANDARDS (2010)
Recast Directive
Draft European Basic Safety Standards Directive – Version 24 February 2010
TITLE I
SUBJECT MATTER AND SCOPE
Article 1

1. The subject matter and general purpose of this Directive is the health protection of the public, patients and workers against the dangers of ionising radiation; this Directive also applies to the protection of the environment as a pathway from environmental sources to the exposure of man, complemented where appropriate with specific consideration of the exposure of biota in the environment as a whole. . . .

*4. This Directive **applies to existing exposure situations** other than those involving exposures excluded under Article 3; it applies in particular to the exposure of the public*

to indoor radon and to external exposure from building materials; ***cases of lasting exposure resulting from the after-effects of an emergency or a past activity shall be dealt with as an existing exposure situation****.*

TITLE III
System of Radiation Protection
Article 5
Member States shall establish legal requirements and an appropriate regime of regulatory control which for all exposure situations within the scope of this Directive reflects a ***system of radiation protection based on the principles of justification, optimisation and dose limitation****:*

(a) Decisions introducing or altering a radiation source, an exposure pathway or actual exposures shall be justified: the decision shall be taken with the intent to ensure that the individual or societal benefit resulting from that decision shall offset the detriment that it may cause.

Article 46
Justification
1. Member States shall ensure that new classes of practices resulting in exposure to ionising radiation are justified in advance of being first adopted or first approved.

2. Existing classes of practices shall be reviewed as to justification whenever new and important evidence about their efficacy or potential consequences is acquired.

1.5 There are human rights aspects of exposure to radionuclide pollution which are implicit in the following:

1.6 As early as 1972 the Stockholm Conference on the Human Environment addressed the interrelationship between Human Rights (as already enshrined in the Articles of the UN Declarations) and environmental protection.

1.7 At the 1968 Teheran conference, Principle 1 of the final UN declaration stated (Final Declaration 1972):
"Man has the fundamental right to Freedom, Equality and Adequate conditions of Life in an environment of a quality that permits a life of dignity and well-being and he bears a solemn responsibility to protect and improve the environment for present and future generations" (International Covenant on Economic, Social and Cultural Rights Dec 16 1966 993 UNTS 2, 6 ILM 360 1967)

1.8 22 years later UN Resolution 45/94:
"Recognises that all individuals are entitled to live in an environment adequate for the health and well-being and calls upon member states and intergovernmental and non-

governmental organizations to enhance their efforts towards a better and healthier environment."

1.9 To those whose well-being suffers due to environmental degradation Human Rights law currently provides the only set of international legal procedures that can be invoked to seek redress for harm that is the consequence of an act or an omission attributable to a State. The inclusion of INACTION is significant since most environmental harm is due to inactivity of the State.

1.10 Whilst no international human rights procedure allows direct legal action against private enterprises or individuals who cause environmental harm, a State allowing such harm may be held accountable.
As Judge Weeremantry of the International Court of Justice put it:
"The protection of the environment is a vital part of contemporary human rights doctrine. Damage to the environment undermines all of the human rights spoken of in the Universal Declaration."

1.11 Degradation of the environment impacts the right to health and the right to family when genetic or genomic damage is involved since human fertility is affected.

1.12 The Procedural consequences are

Rights to environmental information
Public participation in decision-making
Remedies in the event of environmental harm

1.13 The Stockholm Principle 1 and Rio Declaration both state
"Individuals shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings including redress and remedy shall be provided."

1.14 This means proceedings in the national court before a judge. If the court process is not given, the matter is to be taken to the international court.

1.15 The 1998 Aarhus Convention (UNECE) states
"Every person has the right to live in an environment adequate for his or her health and well-being and the duty, both individually and in association with others to protect and improve the environment for the benefit of present and future generations"
Article 1
"Citizens must have access to justice in environmental matters"
Whereas the WHO European Charter states
"Every individual is entitled to information and consultation on the State of the Environment"

1.16 It follows that Public Participation in environmental decision-making is a right and it follows from the above that there must be such participation based on the RIGHT of those who may be affected, including foreign citizens and residents to have a say in their environmental future

The right to be heard
The right to affect decisions
The right to remedy and redress

1.17 Principle 10 of the Rio Declaration gives effective access to judicial and administrative proceedings including redress and remedy.

1.18 There exists widespread radioactive pollution of the <Baltic Sea and Baltic Sea coasts> and projects are being discussed involving further such contamination.

1.19. Much information on the radioactivity of the Baltic Sea region is missing. Whilst some information on the current levels of environmental contamination is available in scientific literature, the public is left uninformed. Missing is even the interpretation in terms of effects of environmental contamination on public health. The issue is not properly discussed, nor is it open to such discussion by those citizens affected by environmental degradation. Huge efforts are made to limit pollution from cigarette smoke even though the evidence of ill health from passive smoking is weaker than the evidence of ill health due to radioactive contamination following Chernobyl effects in Sweden (Martin Tondel et al., 2004)

1.20 Such discussion and consultation is essential to inform on the potential harm of this contamination.

1.21 Many informational aspects of the contamination levels are not available or have not been obtained through measurements, e.g. (i) sea to land transfer of radionuclide particles and inhalation in coastal environments (ii) concentration of uranium particulates in coastal environments

1.22 Private industry continuing contamination of the Baltic (e.g. Studsvik, Fortum, E.ON, Vattenfall, etc) has not been properly made subject to any of the procedures on public participation in decision-making.

2 New Science and Justification

2.1 There is a great deal of important new scientific information on the health effects of radionuclide exposures. This new information is from epidemiology and also from basic theoretical and laboratory discoveries.

2.2 Various examples of failure of the current radiation risk model, that on which the BSS Directive is based are referred to in the annex. All have in common that the new evidence shows unequivocally that assessment of **internal radionuclide** genotoxic effects on health cannot be safely assessed using the concept of absorbed dose which is only correct for external doses which can be averaged over large tissue masses or whole organs. For a discussion see ECRR2010.

2.3 A review of this information is attached in Appendix 1 and is also presented in the ECRR2010. These evidences show unequivocally that the health consequences of exposure to internal radionuclides is not assessed properly by the current radiation risk model upon which the EURATOM Basic Safety Standards Directive 96/29 was based. The consequences are that people are dying and will in future die.

2.4 It is of concern that both the risk models of the ICRP and the documents of the United Nations Scientific Committee on which these models are based do not cite or discuss the many peer reviewed scientific reports that show their models to be highly unsafe for internal radionuclide exposures.

2.5 The most recent draft of the Euratom BSS Directive, from which the excerpts above have been taken, has made **no changes** in its dose limit data presented in its Annexes which were constructed in the period up to 1996 despite the clear evidence from new scientific discoveries and from epidemiology that the risk model on which it is based is unsafe for internal exposures.

2.6 The Basic Safety Standards Directive contains in Article 46 paragraph 2 the clause (see above) ***Existing classes of practices shall be reviewed as to justification whenever new and important evidence about their efficacy or potential consequences is acquired.***

2.7 Methodology for assessing the effects of environmental contamination such as that outlined in paras 1.18-1.22 is suspect and has not been opened for discussion or the public right to affect decisions etc which is a fundamental human right (para 1.16). For example, adoption of either the risk models of the International Commission on Radiological Protection (ICRP) or that of the European Committee on Radiation Risk (ECRR) has not been addressed in a way that will involve members of the public who will be affected by exposures to radioactivity which is limited and controlled by the provisions of the Basic Safety Standards Directive and its Justification.

2.8 The Swedish national competent authority SSM (Strålsäkerhetsmyndigheten) is irresponsible in that it has not incorporated developments in radiation risk assessment and many recent post-Chernobyl studies which show clearly that its current methodology is unsafe for radiological protection of the public.

2.9 It is a matter of deep concern that the national competent authority, which has been informed of and is aware of the failures of the risk model on which it bases its advice. It has been provided both with evidence and a copy of the Lesvos Declaration of 18

Eminent Radiation Experts calling for the abandonment of the ICRP Risk Model. Subsequent to this, SSM has made no effort itself to open the question of Justification which it is required to do under the BSS.

2.10. Regarding the question of disputed methodology for radiation risk assessment it is a matter of serious conflict of interest that the Medical Officer of Health for Sweden, the head of Socialstyrelsen, is Lars-Erik Holm who was previously head of SSM (previously SSI) and also President of ICRP whose risk model is used to inform risk from such radiation exposure. This is similar to the recent conflict of interest scandal of professor Anders Ahlbom at the Karolinska Institute and mobile phone radiation safety [cf. http://www.monanilsson.se/document/AhlbomConflictsIARCMay23.pdf].

2.11 Regarding the question of disputed methodology for radiation risk assessment it is a matter of concern that there are influential members of the ICRP Committee who have until recently been employed by the Nuclear Industry and therefore may be seen as being biased through a conflict of interest.

2.12 A similar concern which may be subsumed within the human rights and environment considerations is that small area cancer and other disease incidence data which would inform on these issues is seen as information on the environment and should be subject to the above human rights declarations yet is kept confidential by Socialstyrelsen and Statistiska Centralbyrån in Sweden. Whose head is the ex head of the ICRP, Lars Eric Holm.

Plea

3.1 We therefore require access to judicial proceedings for redress and remedy for Environmental Justice in the case of nuclear pollution and on-going nuclear policy, based on the legal requirements of the EURATOM Directive.

3.2 In particular we require the Ministry of the Environment in <SWEDEN> conduct an open re-assessment of **all Justifications of current exposures** of the public including but not limited to the above examples of Studsvik and the contamination of the Baltic Sea.

3.3 The reassessment of the Justification is based on the legal requirements of the Euratom BSS to which the State of SWEDEN is bound (para 2.5).

3.4 Such a reassessment must include the human rights aspect of **public participation** and the **ability of the public to affect decisions**.

3.5 The **form of such a reassessment must be therefore such that it is made independent of the current National Competent Authority** although it must include experts from the current National Competent Authority and perhaps also from the ICRP. It should be in the form of a **re-assessment the adequacy of the current Justification in view of the new scientific evidence into the health effects of internal radionuclides** and be organized and administered by the Environment Ministry or an independent group

appointed by the Environment Ministry. It must include evidence and expertise provided by the public and by NGOs in order to follow the Human Rights considerations implicit in para 3.4. It will naturally include experts and expert evidence appointed by the Baltic Sea Regional Office of the European Committee on Radiation Risk .

We the undersigned in respect of the above arguments require access to judicial proceedings reviewing the legitimacy of the behavior of the State and its appointed instruments in the matters of the environmental radioactive contamination of the Baltic Sea, The Basic Safety Standards Directive and the need to re-assess all current Justifications in view of new and important scientific facts which have emerged since the drafting of the Directive in 1996 and the effects of current practices and contamination situations on Human Rights and the Environment.

Attached link is a brief summary of PDFs of some of the HELCOM.fi scientific reports on the radioactivity of the Baltic Sea region:
http://www.bsrrw.org/wp-content/uploads/2010/06/BS-radioactive-.pdf

Note (1) The current radiation risk model is that of the International Commission on Radiological Protection (ICRP), until recently based in Sweden. This model has been shown to be unsafe for internal radionuclide exposures and has been overtaken by that of the European Committee on Radiation Risk (ECRR) whose 2010 report discusses this issue (www.euradcom.org). We will provide full evidence to the court.

SIGNED:

ADDRESS

PERSONAL NUMBER/ PASSPORT NUMBER

APPENDIX 1

Evidence of failure of the current Basic Safety Standards Directive and the new and important information that requires the re-justification of all radiation producing practices in the territory

The Petition is based on the following:

1. Radiation exposure is legally controlled in Europe by the Directive EURATOM 96/29 which has been updated in 2012 and either is being or has already been adopted by Member States. It is thus law.
2. The latest version of this "Basic Safety Standards" Directive has a clause which requires a re-justification of all radiation practices if new and important information which affects the scientific assessment of radiation risk becomes available.
3. The ICRP risk model is formally adopted by this BSS Directive which depends on it for its calculation of the quantity of ill-health (e.g. cancer, leukemia) caused by any dose.
4. Since 1996 when the BSS was written there have been many scientific and epidemiological studies and reports which show the ICRP model to be wrong by a very large amount. Therefore, the BSS law requires a Re justification of all radiation practices.
5. The error in ICRP for the kind of internal exposures is between 300 and more than 1000-fold. This means that between 300 and more than 1000 times more people develop radiation related cancer than the ICRP model predicts.

There is some confusion about what this means, and many people feel that this number is very large and could not have been overlooked by the ICRP. So I (we) will just briefly give an explanation of how it is worked out, for a number of different cases. We have to begin by saying what a risk model is. The ICRP model is based on the idea of DOSE. This is measured in Milli Gray or Milli Sievert. It is defined as the absorbed energy per unit mass in Joules Per Kilogram. Such a measure of radiation exposure cannot be used for internal radiation effects from e.g. plutonium particles since one single particle of diameter a few micrometers will impart huge amounts of energy to local cells but if averaged over large masses of tissue the DOSE will be almost nothing. This is the origin of the large error factor. A list of evidence that this is so follows. These are by no means all the instances of the failure of the current risk model but science does not require many instances of the failure of a theory; one instance is enough for the theory to be dismissed as wrong.

List of evidence

1. Childhood cancer near nuclear installations

There have been reports in peer reviewed journals of increased risk of childhood leukemia and non Hodgkin lymphoma near many nuclear sites in Europe. A list and discussion may be found in ECRR2010. Child leukemia excesses are found near nearly

all the sites that have been examined [1] e.g the reprocessing sites at Sellafield [2] Dounreay UK [3] and La Hague (France) [4] near the Atomic Weapons Establishment Aldermaston (UK) [5], the Atomic Energy Research Establishment Harwell (UK) [6], near Hinkley Point nuclear power station (UK) [7] and recently, after 1996 when the BSS was written, near all the combined nuclear sites in Germany (KiKK study) [8, 9] and near all the combined nuclear sites in France [10].

The radiation risk community [e.g 9, 11, 12] basing calculations on the ICRP risk model have worked out the doses ranges and say they cannot be more than a few hundred microSieverts, well below Natural Background. The ICRP risk model predicts an excess risk of 0.05 leukemias per Sievert. 100 microSieverts is 1/10,000 th (10^{-4} of a Sievert). So the excess risk living near a nuclear power station according to ICRP is 0.05 x 1/10,000 = 0.000005. But we see a doubling of risk, there are twice as many child leukemias as are expected. In this case, the error in the ICRP is more than 10,000 times. But we can also employ the Risk model for child leukemia following obstetric X-rays (Alice Stewarts studies). Stewart found a 40% excess risk after an X-ray dose of 10mSv. That would suggest a 4% increase after 1mSv, 0.4% after 100uSv. But we are seeing a 200% increase at this level. The error is now 200/0.4 = 500-fold. However the ICRP do not accept the Stewart findings or at least they are not incorporated into the model.

2. Infant leukemia after Chernobyl

Five different groups [13-17] reported a statistically significant increase in infant leukemia in 5 different countries of Europe in those children who were in the womb at the time of the Chernobyl Caesium-137 fallout as measured by whole body monitoring. The effect was also reported from the USA [18]. Thus the Chernobyl exposure is the only explanation for the increase. This occurred and was reported from Greece, Germany, Scotland, Wales, Belarus, USA and the error this shows in the ICRP model was the subject of two peer reviewed papers in 2000 [17]and 2009 [19]. Using the Alice Stewart relation between dose and leukemia above, the error is about 400-fold (depending on the country) [19]. Using the ICRP model it is upwards of 1000-fold. This analysis is most relevant since it unequivocally supports the causal relation revealed by the nuclear site child leukemias yet in this case fission product internal radiation can be the only cause.

3. Cancer following Chernobyl in Northern Sweden

The study by Martin Tondel found a 11% increase in cancer for every 100kBq/sq metre of Cs-137 from Chernobyl [20]. It is possible to calculate that 100kBq/m^2 Cs-137, if it remained there for one year, would give a dose of about 3mSv [22] The ICRP model [21] predicts 0.05 cancer risk per Sv, so would predict a risk of 0.05 x 3 x 10^{-3} = 0.015 %. The error is 11/.015 = 733-fold. Of course the Cs-137 did not remain there at the initial levels for a year and the UN provided an assessment [23] that showed that Sweden received far less than this dose. Accordingly, the error in the ICRP model is higher than this.

4. Human sex ratio at birth perturbed by low doses of internal fission-product ionising radiation

Studies by Hagen Scherb and Kristina Voigt [24] show clear and highly statistically significant alterations in the human sex ratio at birth (the number of boys born to girls) after (a) atmospheric bomb testing, (b) Chernobyl and (c) near nuclear facilities. Effects are shown to be local, European (several countries were studied) and global, supporting earlier evidence of increases in infant mortality during the period of atmospheric weapons testing [25, 26]. Sex ratio has been accepted as a measure of genetic damage with the preferential killing of one or other sex depending on the type of exposure (mothers or fathers). According to Sherb and Voigt, millions of babies were killed by these effects [27]. Recent re-analysis of the sex ratio effect in Hiroshima reveals the effect in those populations also [28], evidence which was overlooked by the USA researchers through poor epidemiology and questionable decisions. This evidence objectively confirms the serious genotoxic effect of internal ionising radiation on germ cells and the exquisite sensitivity of humans and other living creatures to releases from Uranium fission. Neither the BSS nor the ICRP consider such effects nor are they included in any assessment of harm. This is clearly a human rights issue which was not considered when the BSS was prepared in 1996 and the effects of internal fission nuclide exposures on the foetus and germ cells has now been confirmed.

5. Cancer, leukemia/lymphoma and heart disease in Uranium workers

Irina Guseva Canu and co-workers in the French nuclear risk establishment IRSN have been studying the health effects of Uranium exposure on French nuclear workers who are exposed only to Uranium. There are three relevant published papers [29-31]. These show a number of things. First that very low doses of Uranium exposure by inhalation cause increased hazards of developing lung cancer and lymphoma/leukemia. Second they find that the severity of the risk of a question of the type of Uranium exposure. In addition, the authors show that the exposures cause increased risk of heart disease. By employing exposure matrix the method used by the authors with their earlier correlation between their exposure matrix and absorbed dose as calculated by an ICRP based UK Health Protection Agency computer model [29, 30] it is easy to show that the error in the ICRP model shown by the studies is of the order of 2400-fold. That is to say, there are 2400 times more lymphomas that are predicted by the ICRP risk model. This finding supports the discoveries in Iraq and the Balkans of Uranium effects in those exposed to weaponised Uranium nanoparticles.

6. Secondary Photoelectron Effect

The ability of high atomic number (Z) elements in the body to act as antennas for natural background gamma radiation was published in 2005 [32, 33] and 2008 [34,35]. Briefly, the physical absorption of natural background gamma radiation by elements of proportional to the fourth power of their atomic number Z. This means that nano particles of insoluble high Z elements (Gold, Platinum, Uranium) absorb background radiation thousands of times more effectively than living tissue (mainly water) and then release this energy into tissue as local photoelectrons. This means that the radiation dose near such particles is extremely high. Two computer studies by the radiation establishment have conceded that there is an enhancement of dose near such particles [36, 37] but both have

shown that the enhancement is finite but modest. The studies are both flawed by the same methodology, which is to dilute the energy into a large volume of tissue. The experimental measurements with gold foil [38] and gold nanoparticles [39] and other computer analyses which examine the dose close to the particles [40] show quite clearly that the effects are those of high enhancement of dose largely predicted by theory. In addition, since Uranium, which has the highest Z of any element also has a strong affinity for DNA, the enhancement of hazard from molecular or ionic Depleted Uranium, shown by a number of studies [41,42] is explained. The SPE has not been incorporated into ICRP risk modelling and these discoveries (and others relating to Uranium hazards [43, 44] reported since 1996) falsify the ICRP risk model which is the basis of the BSS.

7. Cancer and genotoxic effects in Iraq following DU exposure

A series of studies of the population of Fallujah Iraq shown [45 -47] to have been exposed to Uranium following the 2003-2004 battles have revealed extremely high rates of congenital malformation at birth and cancer and leukemia/lymphoma in adults. The studies also draw attention to significant sex ratio effects at birth beginning after 2004. These results, and the increases in genotoxic effects in the offspring of Gulf veterans support and are supported by the other sets of observations reviewed above which show that inhaled Uranium nanoparticles represent a very serious hazard which was not incorporated into the BSS and is entirely overlooked by ICRP.

8. Chernobyl effects as reported in the Russian peer-reviewed literature

The effects of the Chernobyl accident exposures have been reported in the Russian language peer review literature since 1996. These results have been reviewed by Busby and Yablokov 2006 [48] Yablokov et al 2010 [49] and Busby et al 2011 [50] but have been largely ignored by ICRP. They constitute a very large body of peer reviewed work which show that the effects of the Chernobyl accident exposures are massive and extremely serious [50]. They range from cancer and leukemia to heart disease especially in children together with a range of illnesses which can be best described by the term premature ageing [51]. They include congenital transgenerational diseases and are reported in animals and plants which cannot be affected by the kind of psychological processes (radiophobia) which have been employed by the radiation risk establishment to account for the early reports coming out of the affected territories. In addition, there are objective measurements of serious biological harm to humans and other living creatures affected by the exposures. The germline mutations found by minisatellite tests [53] in humans were also associated with real morphological effects and fitness loss in birds [54] and were shown top have caused significant sex ratio changes in the birds and also population loss [55] which is in agreement with the findings of Scherb andVoigt [24] and the infant mortality fndings [25, 26]. The implications for the understanding of the historic effects of the nuclear project on human health are alarming.

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APPENDIX 2
LESVOS DECLARATION

ECRR - CERI

European Committee on Radiation Risk
Comité Européenne sur le Risque de l'Irradiation

The Lesvos Declaration

6th May 2009

A. Whereas, the International Commission on Radiological Protection (ICRP) has promulgated certain risk coefficients for ionizing radiation exposure,

B. Whereas, the ICRP radiation risk coefficients are used worldwide by federal and state governmental bodies to promulgate radiation protection laws and standards for exposure to workers and the general public from waste disposal, nuclear weapons, management of contaminated land and materials, naturally occurring and technologically enhanced radioactive materials (NORM and TENORM), nuclear power plant and all stages of the nuclear fuel cycle, compensation and rehabilitation schemes, etc,

C. Whereas, the Chernobyl accident has provided the most important and indispensable opportunity to discover the yields of serious ill health following exposure to fission products and has demonstrated the inadequacy of the current ICRP risk model, especially as applied to foetal and early childhood exposures to radiation,

D. Whereas, by common consent the ICRP risk model cannot validly be applied to post-accident exposures, nor to incorporated radioactive material resulting in internal exposure,

E. Whereas, the ICRP risk model was developed before the discovery of the DNA structure and the discovery that certain radionuclides have chemical affinities for DNA, so that the concept of absorbed dose as used by ICRP cannot account for the effects of exposure to these radionuclides,

F. Whereas, the ICRP has not taken into consideration new discoveries of non-targeted effects such as genomic instability and bystander or secondary effects with regard to understanding radiation risk and particularly the spectrum of consequent illnesses,

G. Whereas, the non-cancer effects of radiation exposure may make it impossible to accurately determine the levels of cancer consequent upon exposure, because of confounding causes of death,

H. Whereas, the ICRP considers the status of its reports to be purely advisory,

I. Whereas, there is an immediate, urgent and continuing requirement for appropriate regulation of existing situations involving radioactivity, to protect the human population and the biosphere,

We the undersigned, acting in our individual capacities

1. assert that the ICRP risk coefficients are out of date and that use of these coefficients leads to radiation risks being significantly underestimated,

2. assert that employing the ICRP risk model to predict the health effects of radiation leads to errors which are at minimum 10 fold while we are aware of studies relating to certain types of exposure that suggest that the error is even greater,

3. assert that the yield of non-cancer illnesses from radiation exposure, in particular damage to the cardio-vascular, immune, central nervous and reproductive systems, is significant but as yet unquantified,

4. urge the responsible authorities, as well as all of those responsible for causing radiation exposures, to rely no longer upon the existing ICRP model in determining radiation protection standards and managing risks,

5. urge the responsible authorities and all those responsible for causing exposures, to adopt a generally precautionary approach, and in the absence of another workable and sufficiently precautionary risk model, to apply without undue delay the provisional ECRR 2003 risk model, which more accurately bounds the risks reflected by current observations,

6. demand immediate research into the health effects of incorporated radionuclides, particularly by revisiting the many historical epidemiological studies of exposed populations, including re-examination of the data from Japanese A-bomb survivors, Chernobyl and other affected territories and independent monitoring of incorporated radioactive substances in exposed populations,

7. consider it to be a human right for individuals to know the level of radiation to which they are exposed, and also to be correctly informed as to the potential consequences of that exposure,

8. are concerned by the escalating use of radiation for medical investigation and other general applications,

9. urge significant publicly funded research into medical techniques which do not involve radiation exposures to patients.

Statements contained herein reflect the opinions of the undersigned and are not meant to reflect the positions of any institution to which we are affiliated.

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