

## Exposure to Radiation During Pregnancy Policy

Research has shown that a fetus is more sensitive to the damaging effects of radiation exposure, particularly during the first trimester of the pregnancy. In recognition of this increased radiation sensitivity, a more restrictive dose limit has been established for the embryo/fetus of a declared pregnant radiation worker. Guidance in conformance with the revised 10 CFR Part 20 is being developed as a proposed Revision 3 to Regulatory Guide 8.13. It has been published as Draft Regulatory Guide DG-8014 "Instruction Concerning Prenatal Radiation Exposure". Currently NRC regulations require that the radiation dose to the fetus of an occupationally exposed pregnant worker be held to 0.5 rem (5 mSv) or less during pregnancy. (see also Declared Pregnant Radiation Worker Policy Statement)

Radiation protection regulations allow a pregnant radiation worker to decide whether she wants to formally declare her pregnancy to her employer, thereby taking advantage of the special dose limits provided to protect the developing embryo/fetus. If an occupationally exposed woman declares her pregnancy to the Radiation Safety Officer then she is subject to the more restrictive dose limits for the embryo/fetus during the remainder of the pregnancy which is controlled by restricting the exposure to the declared pregnant woman. Restricting the woman's occupational exposure, if she declares her pregnancy, raises questions about individual privacy rights, equal employment opportunities and possible loss of income. Because of these concerns, the declaration of pregnancy by a woman radiation worker is voluntary. Conversely, the woman can also withdraw her declaration of pregnancy by notifying the Radiation Safety Officer.

When a worker has made the decision to formally declare her pregnancy, she may complete "Form Letter for Declaring Pregnancy" or she may submit her own letter. Once this form has been received, the Radiation Safety Officer will contact the worker to discuss her use of radioactive materials or work with x-ray producing equipment in the lab, her previous exposure history and any other relevant information. At this time, the worker is offered the opportunity to enroll in the pregnancy surveillance program that allows for the closer monitoring of radiation exposure to the fetus during the entire pregnancy.

FORM LETTER FOR DECLARING PREGNANCY

This form is provided for your convenience. To make your declaration of pregnancy, you may fill in the blanks of this form letter and give it to your employer/Environmental Health & Safety or you may write your own letter.

DECLARATION OF PREGNANCY

TO: \_\_\_\_\_  
(Name of Supervisor or Radiation Safety Officer)

In accordance with the NRC's regulations at 10 CFR 20.1208, "Dose to an Embryo/Fetus," I am declaring that I am pregnant. I believe I became pregnant in: \_\_\_\_\_ (only month and year need be provided).

I understand the occupational radiation dose to my embryo/fetus during my entire pregnancy will not be allowed to exceed 0.5 rem (5 millisievert) (unless that dose has already been exceeded between the time of conception and submitting this letter). I also understand that meeting the lower dose limit may require a change in job or job responsibilities during my pregnancy.

I will promptly inform the Dartmouth College Radiation Safety Officer in writing when my pregnancy has ended.

\_\_\_\_\_  
(Your signature)

\_\_\_\_\_  
(Your name -printed)

\_\_\_\_\_  
(Date)

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