

PROCEDURES FOR USERS WHO WORK WITH RISK FROM IONIZING RADIATIONS AT LNL

The person in charge of each experiment (or test) that is carried out at the LNL is required to:

1. Deliver to the Radiation Protection Service, at least 4 working days before the start date of each experimental shift, the form Declaration of Responsibility (https://www.lnl.infn.it/wp-content/uploads/Responsability_Declaration.pdf), duly filled in, especially the list of participants and their affiliation, and signed. If it is a new experiment, please provide the safety data sheet of the experiment.
2. Be sure that all non-LNL participants have completed the access authorization procedures at Legnaro National Laboratories.
3. Collect the personal dosimeters, if foreseen, of the participants in the shift from the Radiation Protection Service.
4. Arrange that the participants know and observe the radiation protection rules or any other safety procedures related to the experiment and that they correctly use the personal dosimeters or any assigned safety device.
5. Ensure the execution of the procedure “*search for persons*” in the experimental room before any beam delivering.

LNL USERS – Radiation protection form and radiation protection documents

A) LNL Users as INFN Employee/Grant Holder/Fellow/Associated

The submission to the LNL of the copy of their own INFN radiation protection form automatically MEANS THAT their physical and medical surveillance are under the responsibility of their **INFN** organization (otherwise the “External Users” form should be sent to the LNL).

The radiation protection forms should be **fulfilled in every part**, with specific attention to the classification and dose constraints for activities at the LNL. If the information in the form is incomplete or wrong, the form will not be processed and the user will not be authorized to work with risk of ionizing radiation.

Exposed worker should provide to the LNL Radiation Protection Service:

- a copy of his/her suitability certificate, issued by the Medical Physics Expert of his/her Institution
- a declaration of the successful training in radiation protection, specifying the date of the training, issued by his/her Institution

The above-mentioned documents must be not expired.

LNL USERS - ACCESS OF EXPOSED WORKERS IN LNL CLASSIFIED AREAS (controlled or supervised)

- User access in classified areas of the LNL is normally not allowed.

In exceptional circumstances when this access is essential, Exposed users (Cat. A or Cat. B) must send a duly motivated request for authorization to enter a LNL classified area (controlled or supervised) to the Radiation Protection Experts.

If the request is accepted:

- The legal requirements of art. 113 (Legislative Decree 101/2020) must be complied with.

Or, as an alternative,

- a "Contractual Agreement" should be sent to the Employer of the user, who is kindly asked to sign it and return to LNL, before the user starts his activity as an external worker, as required by current legislation.

THE CLASSIFICATION OF THE ACCELERATORS AND OTHER AREAS CAN BE DESCRIBED: if needed, please send an email to the radioprotection service.

MEASUREMENT SHIFTS

- With regard to the personnel included in the measurement shifts, as indicated in the Declaration of Responsibility, the participation of **Exposed and Non-Exposed Workers** in the shift is authorized if:

1. Activity is included in the radiation protection form
2. Valid successful training in radiation protection

Only for Exposed Workers:

3. Valid suitability to work with risk of ionizing radiation (a copy of the medical certificate should be provided)

Only for Exposed Workers classified in Cat. A:

4. Radiation protection passbook, duly filled in.

"Occasional visitors"

Students who participate in a single measurement shift are considered "occasional visitors". The signatory of the Responsibility Declaration has the responsibility of their activity. Occasional visitors can be provided with a pen dosimeter, following the instructions that have always been in force at LNL (Surname, Name, starting dose and final dose, registered by the pen, must be recorded on a special sheet in the console area of the accelerator).

Users who only stop in the «unrestricted area» during a measurement shift are required to comply with all the above rules.

MEASUREMENT SHIFTS FOR WHICH THE RESPONSIBILITY DECLARATION IS NOT REQUIRED

- The performance of activities with risk from ionizing radiation that do not require a Responsibility Declaration to be provided (i.e. test with cavities, use of sources) depends on:

1. Activity included in the radiation protection form
2. Valid suitability, if provided for (and copy of medical certificate)
3. Valid training in radiation protection (also for non-exposed workers)
4. Radiation protection Passbook (only for Exposed Cat. A workers)
5. The measurement shift must be communicated to the LNL Radiation Protection Service at least 3 working days before starting, as far as it is concerned.

B) EXTERNAL Users (whose employer is other than INFN)

They should provide to LNL Radiation Protection Service the "External Users" form, duly filled in and signed by their Employer.

If the information in the form is incomplete or wrong, the form will not be processed and the user will not be authorized to work with risk of ionizing radiation.

External users, according to the radiation protection classification and the activities to be carried out, are asked to apply all the rules indicated in the previous point A).