



FACTS

Contractors are expected to follow our safety rules and OH & S regulations as they apply to their job scope.

1 . Nuclear Energy Worker –
Classification of an Industrial Radiographer.

2 . Radiation is not residual – After exposure there is no radiation contamination or hazard left on the part that was examined.

3 . Radiation cannot be detected by any of the human senses – You cannot see, smell, feel, hear, or taste radiation.

4 . Radiation Burn – Can only occur if you physically touch the radiation source capsule directly.

5 . Monitoring the area – Radiographers are required to be continually watching the area where the exposure is taking place. This is to ensure no one has entered the restricted zone and put themselves in harm.

6 . ALARA – Stands for As Low As Reasonably Achievable – Radiographers use time, distance and shielding principles to protect themselves and others.

7 . CNSC. – Canadian Nuclear Safety Commission – Federal Regulatory body that enforces the regulations. A Radiography company is required to have a license to carry out radiography in Canada.

8 . Milli Sievert –The metric unit used to measure the absorbed dose of radiation. Maximum exposure allowed to any non-Nuclear Energy Worker is 0.1 mSv in any one period of time.

CIRSA Member Licensee Contact on Site

(place stamp or company contact info here)

Industrial Radiography Licensees have a legal obligation to post barriers and then control and monitor the area under the CNSC Act and its Regulations. Licensees work jointly with Prime Contractors to ensure the protection of other contractors to hazardous radiation.

www.cirsa.ca



RADIATION SAFETY ON SITE

RADIATION RISKS & HAZARDS



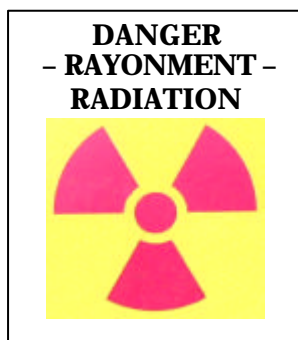
VISITORS & CONTRACTORS

Industrial Radiography is often carried out on site to examine welds for integrity.

Radiography usually is carried out in **RESTRICTED ZONES** or within periods where other contractors are on breaks, or in-between shifts. This is to be able to keep persons out of the hazardous zone.

Radiation is hazardous to humans because it has the ability to ionize and damage cell tissue. Small amounts of exposure to radiation will not cause any harm, and therefore signs are posted to prevent persons from entering the controlled zone.

RESTRICTED ZONES CAN BE RECOGNIZED BY:



These will be identified by the use of radiation warning signs. They will include the international radiation symbol and are required to have the words “DANGER – RAYONMENT – RADIATION”.

The signs are usually posted on ropes around the zone. The signs and barriers need to be placed at the zone where the radiation dose rate does not exceed 2.5 mRems/hour (25 µSv/hour)

Radiographers will perform sweeps of the area to check for persons inside the barriers and then evacuate those persons prior to conducting exposures.

INDUSTRIAL RADIOGRAPHERS

Industrial Radiographers inside the barrier are specially trained in the use of the radiographic equipment and control of the source of radiation. They have been trained in how to protect themselves while inside the hazardous zone.

They are required to use a calibrated survey meter to monitor the radiation as exposures are conducted.

They are required to wear specific personal radiation detection equipment that monitors the radiation dose they obtain daily and over a 2 week period.

PROTECTING YOURSELF AND YOUR CO-WORKERS

- **DO NOT CROSS BARRIERS** – this is the easiest way to protect yourself.
- If radiography is conducted on site, be observant of the **RESTRICTED**

ZONES, scheduled windows and the posting of signs.

- Never cross a barrier for any reason. - You could be placing yourself at extreme risk if you come in close proximity of the radiation source.
- Leave the area when asked by industrial radiographers.

