

Radiation Safety Operating Procedure

NO.: RSOP04-R3 Approved By: URSC Date: 2013/10/29

Decontamination

1.0 Statement

In the event of personal contamination immediate action must be taken to decontaminate your eyes, skin, hair or clothing **in this order**. As soon as possible contact the RSO (864-8250) for assistance in safe decontamination techniques <u>and inform your supervisor</u>. The Canadian Nuclear Safety Commission (CNSC) will be notified by the RSO of any event where a worker is contaminated.

Locate the contamination using appropriate survey meter. Pay close attention to your hands and feet. Ask a colleague for assistance to summon help if you are contaminated. Monitor slowly (1 cm/sec) with the contamination meter, with the setting on fast response.

Dose rate measurements must be recorded for personnel contamination dose estimates. Contact RSO for access to calibrated survey meter.

2.0 Eye contamination

- 2.1 Use local eyewash as soon as possible. Monitor your hand for radioactive contamination; if clean use your thumb and index finger to open your eyelids. Flush for at least 15 minutes.
- 2.2 Monitor for contamination and if necessary repeat the flush.
- 2.3 If your fingers are contaminated ask for assistance to hold your eyelids open.

3.0 Skin contamination

3.1 Wound and broken skin

If you cut yourself or sustain an abrasion while working with nuclear substances:

3.1.1 **Stop work immediately!**

- 3.1.2 Locate and monitor the area where the injury occurred including gloves or other protective clothing using appropriate survey meter. Remove protective clothing if it is appropriate but do not discard them. Keep the contaminated gloves or clothing separate within the radiation work area.
- 3.1.3 Soak a piece of light cloth in lukewarm water and brush the contamination gently **away from the wound**, **never towards the wound**. Keep monitoring and decontamination efforts until you remove all removable contamination.
- 3.1.4 Flush the abraded area with lukewarm water. DO NOT use an abrasive without Radiation Safety Officer approval. Keep monitoring and decontamination efforts until you remove all removable contamination.
- 3.1.5 Contact the RSO as soon as possible (864-8250)



Radiation Safety Operating Procedure

NO.: RSOP04-R3 Approved By: URSC Date: 2013/10/29

Decontamination

3.2 Unbroken skin

3.2.1 **Stop work immediately.**

- 3.2.2 Locate all contaminated areas including gloves or other protective clothing. Remove protective clothing if it is appropriate but do not discard them. Keep the contaminated gloves or clothing separate within the radiation work area.
- 3.2.3 First flush the affected skin area with lukewarm water. If contamination persists use mild non-abrasive soap. Keep monitoring and decontamination efforts until you remove all removable contamination.

(note: Try household vinegar to remove P-32 contamination.)
DO NOT use an abrasive without approval from Radiation Safety.

3.2.4 Contact the RSO as soon as possible (864-8250).

3.3 Hair contamination

- 3.3.1 Locate the contaminated area and flush under lukewarm running water for at least 10 minutes. Re-monitor and if necessary repeat the procedure.
- 3.3.2 If the contamination persists it might be necessary to clip the contaminated hair.
- 3.3.3 Contact the RSO as soon as possible (864-8250).

4.0 Contaminated Clothing

- 4.1 Monitor your clothing including gloves with an appropriate survey meter to locate contamination. Contaminated clothing should be removed and placed on an underpad or in a plastic bag to control contamination. Do not discard contaminated clothing. Keep the contaminated gloves or clothing separate within the radiation work area.
- 4.2 Contact the RSO as soon as possible (864-8250) for situation assessment and advice.