

# Radiological Worker Training Update

## Upgrades to the Wallflower Instrument

November 2016

This note is to inform all personnel currently trained as radiological workers at Fermilab about upgrades being made to the Wallflower instrument. Upgrades to the current Wallflower instruments will be performed as the instruments are turned in for calibration during their normal cycle, so we expect all Wallflowers to receive this upgrade by the end of 2017. During this period of time, radiological workers will encounter both “old” and upgraded instruments and must be able to use either correctly. As always, contact an RSO or RCT with any questions.

### Procedure for using Wallflower:

1. Perform necessary checks to ensure that the instrument is working properly:
  - a. Turned on
    - i. Old Wallflower – green “OK” light on bottom right of the instrument box
    - ii. New Wallflower – red “power” light on bottom left of the instrument box
  - b. No damage – check the cord for frays/kinks, check the instrument box & probe for dents.
  - c. Within calibration – range indicated on sticker on bottom center of the instrument box.
  - d. Source check
    - i. Old Wallflower – not available
    - ii. New Wallflower – place probe on top of black “source check” square on bottom right of the instrument box, aligning tape on the probe with the arrow on the square.
      1. Sticker showing correct response to the check source is to the right of the meter face.
      2. If the source is not within its range, do not use, instead notify the RSO or RCT.
2. Perform the classification survey of the radioactive object in question with the probe at 1 ft (30 cm) away from the object.
  - a. Use the probe handle to help measure 1 ft (30 cm) from the object. *The distance from the tip of the hook to the engraved notch on the handle is 1 ft (30 cm).*



- b. Turn the probe so that it is oriented as shown in the picture on the top left of the instrument box, centering the tape over the “hot spot” found using the Frisker or as shown in picture the right.



## Current ("Old") Wallflower



- Green region still means object is Class 1



- No power indicator
- Ability to disable the alarm



- Additional indicator that a label is needed when hitting yellow region
- No source check

## Upgraded Wallflower



- Green region removed to be more clear about Class 1 range



- Red light to indicate that power is on
- The alarm has been removed



- Additional indicator removed; a label is always needed when using a Wallflower
- Source check, with response label

