Troubleshooting Common Radiation Survey Meter Problems

Problem: While conducting survey, the survey needle is acting erratically and is not providing a consistent reading.

Solution: Keep the meter held as steady as possible near the area being measured. If the needle continues to be unstable, there may be an electrical short in the cable wire connecting the survey meter to the probe. Try replacing the cable with one from a meter that is working properly. If that does not work, get the meter serviced immediately and contact the EHS department.

Problem: The survey meter needle goes all the way to the right and stays there while surveying the work surfaces.

Solution: The scale setting needs to be adjusted. Turn the scale dial to a larger multiplier factor. If the meter is already at its highest setting and the needle is continuing to register readings all the way to the right, there may be radioactive material present in the work area, or the probe may be contaminated. Move the probe away from the area being measured, if the signal does not change the probe is contaminated, if it does change the work area is contaminated.

Problem: The survey meter needle does not move at all.

Solution: First check to ensure that the battery cover is secure and closed. Next check the battery power level. To perform this, turn the dial on the meter to the "BAT" setting. If the meter dial reads below the "BAT TEST", it is time to have the batteries changed.

Problem: Background level is much higher than anticipated.

Solution: Take the reading again in an area that is known to have a low-level reading. If the meter is still reading high levels, the survey meter probe may be contaminated. Thoroughly wipe down the probe carefully with a lab wipe and recheck levels.

Problem: My survey meters last calibration date was over one year ago.

Solution: All survey meters must be calibrated at or within one year. Review the tag attached to the survey meter for the last calibration date and calibration by date (expiration) date. Please stop using the meter if it is out of calibration date and contact the EHS office for the proper calibration of the meter.