Emergency Worker Exposure Control (EWEC) Safety Briefing Video Transcript

This is the California Governor's Office of Emergency Services, (or Cal OES), with your emergency worker exposure control or safety briefing. You're being issued dosimetry because of the potential for exposure to low levels of radiation due to an incident at a nuclear power plant. Dosimetry will help ensure your exposure is recorded in order to keep your exposure as low as possible.

Deployed State workers that may possibly be exposed to radiation such as road and safety workers from Caltrans, the California Highway Patrol and State Parks should receive annual training from your agency. This video serves as a just-in-time training.

Your Emergency Worker Exposure Control dosimetry kit includes the following:
- one electronic direct reading dosimeter (or E D R D);
- one Thermoluminescent Dosimeter (or TLD);
- one Emergency Radiation Worker Exposure Form and Checklist (or Form-1);
- one emergency worker handbook;
- a packet of Potassium Iodide (or KI tablets) to be taken if and when directed;
- and other miscellaneous forms and reference materials.

Regarding the two different types of dosimeters, please note that while a TLD provides an accurate record of exposure, it cannot be read in the field by the responder. In order to allow workers to monitor their radiation exposure while working in the field, a second type of dosimeter, the Electronic Direct Reading Dosimeter (or E D R D) is issued in the kit. An E D R D is designed to work together with the TLD badge. The E D R D gauges any exposure an emergency worker receives. Individuals can take the appropriate action based on the readings shown. This personal dosimeter is a pager-sized device and sounds an alarm when limits are exceeded.

When issued the dosimetry kit, fill out the requested information on the Form-1 within the kit. Insert a battery into the E D R D. Turn the E D R D on and clip it to the outside of your outer most garments between the shoulders and waist. Then, clip the TLD on the outside of the outermost garments about chest high with the small circular window facing outward. On the Form-1, please note your dosimetry readings every half hour.

There are three exposure limits that you should know that apply to radiation emergency workers.
- The first is your Notification Level of 500 milliRem. If you reach an exposure of 500 milliRem on your E D R D, call your radiological emergency response supervisor immediately. You will be given further instructions or told to report back to your office.
The second limit is the Turn Back Value with a Mission Limit of 1,000 milliRem. If your E D R D reading reaches 1,000 milliRem, you have reached the limit for responding to the incident. Notify your radiological emergency response supervisor immediately. In some cases, and extension above this limit can be approved.

The last limit is the Maximum Limit of 5,000 milliRem. This maximum limit may be extended to save lives and valuable property. You are not allowed to exceed this limit for life-saving activities unless you volunteer and receive approval from your supervisor.

To read the E D R D, look at the number in the window. Record this number on your Form-1 at the appropriate intervals. During the incident, remember your Notification Limit is 500 milliRem and your turn back limit is 1,000 milliRem. If you have any specific questions about your dosimetry, direct them to your agency supervisor or dosimetry coordinator.

Potassium Iodide (or KI) tablets are the white tablets inside the blister packets in the dosimetry kit. KI is used to protect your thyroid from absorbing radioactive iodine. Take KI only when directed by the County or State Health Officer and your supervisor. Take one 130 milligram tablet by mouth per day until advised to stop. Record this on the bottom of the Form-1. Do not take KI if you have a pre-existing thyroid disease, sensitivity to iodine or are allergic to shellfish. Side effects may include skin rashes, swelling of lips or tongue, fever and joint pain. If you do not volunteer to take KI when instructed, report this to your supervisor immediately. More information on KI is in your Emergency Worker Exposure Control kit.

***A special note of caution for female emergency workers: federal radiation exposure guidelines stress caution about exposing a fetus to any amount of radiation. The guidelines suggest no matter how small exposure may have a harmful effect on the fetus. Pregnant female emergency workers are asked to consider the risks and make a decision about limiting radiation exposure. There is a Pregnancy Declaration Form (or Form-2) in your Emergency Worker Exposure Control dosimetry kit that can be completed if applicable.

Before going out into the field, take a few moments to review the California State Radiological Emergency Preparedness Emergency Worker Handbook. Here you will find more information regarding nuclear power plant operations and terminology, radiation basics, the Emergency Worker Exposure Control information that was presented here, and other helpful tips to avoid radiation exposure.

If necessary, after your shift, report to an emergency worker decontamination center for monitoring.

Emergency Worker Decontamination locations can be found in your emergency worker handbook or will be established at the time of an incident.
If you have any questions or concerns, please discuss them with your supervisor. Thank you for your attention.