State of California California Environmental Protection Agency

Department of Pesticide Regulation

Restricted Entry Intervals

Bulletin number ENF-001 (Rev. 7/07)

About this document

This document describes restricted entry interval (REI) requirements and responsibilities as set forth in regulation. Contact your County Agricultural Commissioner (CAC) for any questions regarding REIs.

This bulletin is available on the Department of Pesticide Regulation (DPR) web site at http://www.cdpr.ca.gov/docs/enfcmpli/emp_user.htm.

Background

Restricted entry intervals are established to limit the exposure of pesticide residues to workers or other persons not involved in the application of a pesticide. The REI information is listed on the pesticide labeling, however, California regulations may require longer REIs than listed on the labeling for certain pesticides when used on certain crops. In addition, some labeling provides for "activity-based REIs" that allow certain, described activities sooner than other activities.

Definitions

Restricted entry interval (REI) – the period of time after a field is treated with a pesticide during which restrictions on entry are in effect to protect persons from potential exposure to hazardous levels of pesticide residues.

Personal protective equipment (PPE) – special clothing or equipment worn by workers to minimize bodily contact with pesticides or pesticide residues. PPE may include chemical-resistant gloves, suits, footwear, aprons, and headgear. Respiratory equipment and protective eyewear are also PPE.

Hand labor – any activity, performed by hand or with hand tools, that causes substantial contact with any surfaces that may have pesticide residues. These include hand harvesting, weeding, planting, pruning, and packing produce into containers in the field.

Nonagricultural production REIs

Some non-agricultural production pesticide labeling provides specific time periods when persons may not enter the treated area, except those persons directly involved in the application. Other labeling may state that persons may not enter the treated area until "the spray has dried or dust has settled." In all cases, it is the responsibility of the applicator and the operator of the property to assure that no persons enter the treated area until the REI has expired. The exemptions and provisions for early entry described below do not apply to non-agricultural production applications.

Agricultural production REIs

All agricultural production pesticide labeling will provide a specific REI. Title 3 of the California Code of Regulations (3 CCR) section 6772 also provides REIs for certain pesticide/crop combinations. Whenever there is a labeling REI and a regulatory REI for an application, the longer REI must be followed. Early entry by fieldworkers for certain tasks is allowed under the provisions described below. No hand labor tasks are allowed during an REI.

REI adjustments

The following adjustments apply only to REIs listed in 3 CCR section 6772:

- When a mixture of two or more organophosphate pesticides is applied, the REI must be calculated by adding the longest interval required by any product in the mixture to 50 percent of the next longest interval required by any other product in the mixture¹.
- When there is no foliage on the treated crop and any crop or weed cover in the treated area is not over four inches in height, the REI may be reduced by 50 percent. In any case, the REI shall not be less than that specified on the pesticide labeling.
- An REI may be reduced to the labeling-specified REI under certain conditions of rainfall or irrigation. See your CAC for details.

¹ For example: If you make an application to citrus with a mixture of methidathion (30-day REI) and parathion-methyl (14-day REI), the REI would be 37 days.

Types of early entry

There are four fundamental types of reentry:

- 1. **Entry by handlers** to complete the application via activities such as soil incorporation (mechanical or watered-in) provided they are wearing all required PPE.
- 2. **No contact entry** activities that involve no contact with any treated surface. Entry is allowed only after any inhalation exposure standard has been met.
- 3. **Short-term, limited-contact entry** activities (including limited-contact irrigation) that are necessary and unforeseen. A worker may perform this type of activity for no more than 8 hours in a 24-hour period. Exposure must be minimal and limited to the feet, legs (below the knees), hands, and forearms (below the elbows). This type of entry is not allowed for pesticides that require double notification (oral and posting).
- 4. **Short-term, high-contact entry** activities other than those described above but not including hand labor. A worker may perform this type of activity for no more than 1 hour in a 24-hour period.

Additional restrictions

For all early entry, other than that for handling and no contact activities, the employer must assure that:

- At least 4 hours have elapsed since the end of the application.
- Any inhalation exposure does not exceed the standard set by the pesticide labeling and, in greenhouses, the ventilation criteria in 3 CCR section 6769 has been met.
- Workers have been informed of the mandatory 4-hour, restricted entry condition and the inhalation exposure levels and ventilation criteria *before* they enter the work area.
- Workers wear the more-protective of either:
 - o The PPE required by the labeling for early entry; or
 - o Coveralls, socks, chemical-resistant footwear, and gloves, and, if required by labeling, protective eyewear.

An employee may enter a treated field after the expiration of the labeling REI and while an REI specified in 3 CCR section 6772 is in effect to conduct activities, other than hand labor, provided the employee wears work clothing with long sleeves and legs, shoes with socks, and gloves.

Employer responsibility to protect early entry fieldworkers

In addition to standard field worker training, the employer must inform all early entry workers of:

- Pesticide product labeling requirements, including those regarding possible hazards, first aid, and symptoms of poisoning.
- How to obtain emergency medical treatment.
- How to recognize, prevent, and treat heat-related illness.
- The need for and proper use, maintenance, laundering, and storage of PPE.
- The importance of washing thoroughly at the end of the exposure period.

Employers must:

- Provide, maintain, and clean daily all PPE required by labeling or regulation and assure that workers use the PPE properly.
- Assure that PPE is kept and washed separately from other clothing. Work clothing is not considered PPE, but the employer must assure that any work clothing required by labeling or regulation is used properly.
- Assure that one pint of eye-flush water is immediately accessible to each field worker doing early entry activities when the pesticide labeling requires protective eyewear.
- Provide workers with a clean, pesticide-free area for changing into and out of their PPE. There must be sufficient soap, water, and clean towels for a thorough washing at the end of the exposure period, and a clean, pesticide-free place for workers to store their personal clothing.

Activity-based REIs

Some labeling provides for multiple activity-based REIs. For example, a label might say the REI for mowing or irrigating is 48 hours and the REI for hand thinning and harvesting is 14 days.

Workers may perform the specific activity described after the REI listed for that activity has expired, however, the early entry requirements remain in effect until the longest REI on the label (or 3 CCR section 6772) has expired.

In this case, a worker could perform a mowing activity 48 hours after the application was completed, however, all the requirements – informing the worker, requiring work clothing, providing PPE, a change area, and eyewash – would still apply. Additionally, if the labeling required posting, the posting signs would need to stay in place for the entire 14 days.

Exceptions for agricultural emergencies

The finding by the Director of an agricultural emergency can justify an exception to an REI established in 3 CCR section 6772 that is stricter than the federal requirement. The Director must authorize the exception by making a determination that an agricultural emergency exists as defined in the Federal Worker Protection Standard (40 CFR section 170.112 (d)).

If the Director makes the determination that an agricultural emergency exists, the exact types of work and the safety precautions that must be followed will be described in the declaration.

U.S. EPA approved exceptions

The U.S. Environmental Protection Agency (U.S. EPA) has established a formal regulatory process for considering exceptions to the federal REI requirements.

If any exceptions are approved, they will be published in the Federal Register.

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