

III. Requests for Exception and Supporting Evidence

Parties from the States of California and Hawaii each have requested exceptions to the WPS REI requirements for workers performing tasks related to irrigation. The full exception requests are available through the docket at EPA Headquarters, the Regions and the States.

A. California Growers Request for Exception

California growers have requested that workers be permitted entry into treated areas under an REI for an indefinite time to perform irrigation tasks when workers are (1) properly trained, (2) use the label-specified PPE, (3) are provided decontamination facilities, and (4) are not allowed entry to the treated area for at least 4 hours following pesticide application.

California cited a broad range of soil types, climates and crops requiring irrigation tasks such as moving pipe, turning on valves, checking sprinkler and drip irrigation nozzles, and removing debris or obstructions impeding water flow. Requesters indicate that these tasks "do not involve substantial contact with treated plants." The California requesters cite conditions specific to their state to support an REI exception.

1. *Alternate practices.* The California requesters assert that alternative practices are not technically practical because the availability of irrigation water is often at the discretion of the irrigation district. They note that often a grower does not know until the last few hours when water will arrive from the irrigation contractor.

The California requesters also state that the failure to properly irrigate plants in a timely manner induces plant stress, disrupts integrated pest management (IPM) practices, increases plant susceptibility to pests, and may ultimately increase pesticide use, resulting in greater exposure to workers.

Finally, the requesters state that the 1-hour limitation on early entry activity per worker per day unnecessarily restricts agricultural activities vital to crop production.

2. *California regulations.* The requesters cite California Regulations (Article 3, Field Worker Safety, section 6770), which permit workers to perform irrigation activities in treated areas during a restricted-entry interval, provided:

(1) Sprays have dried and dusts have settled.

(2) The workers are informed of the identity of the pesticide applied, the

existence of the REI, and the protective work procedures they are required to follow.

(3) Workers are wearing the personal protective equipment required by the pesticide label for early entry.

(4) The workers are instructed to thoroughly shower with warm water and soap as soon as possible after the end of the work shift.

For certain pesticides, including all pesticides with the signal word DANGER and certain other pesticides with a history of illness or injury incidents involving workers exposed to post-application residues, the California regulations prohibit entry during a restricted-entry interval to perform hand labor tasks, such as picking, other hand harvesting, tying, pruning, tree-limb propping, disbudding, and other nonharvest cultural practices that may involve worker contact with plants. Irrigation tasks specifically are not included in this list of prohibited tasks. For all other pesticides, entry during a restricted-entry interval to perform tasks, including hand labor tasks, is permitted after sprays have dried and dusts have settled, provided the protections listed above are provided to the worker.

The California requesters state that heat-related illness will be mitigated by training workers and field-crew supervisors on heat stress symptoms and first-aid procedures. They note that drinking and handwash water and toilet facilities currently are required for all field workers under California regulations; and that the location of the nearest emergency medical care facility is listed on crop sheets that must be at each work site. They state also that WPS PPE maintenance provisions and early-entry restrictions will be required under California regulations as soon as they are revised to incorporate Federal standards.

3. *Economic impact.* The California requesters estimate a sizeable economic impact if the requested exception is denied, based upon an estimated crew of two to four workers who require 6 to 8 hours to set up a sprinkler irrigation system on a 20-acre block of a vegetable crop. They state that the WPS requirement for worker rotation after 1 hour is problematic because it would reduce efficiency and increase costs to recruit, hire, train and schedule workers; irrigators are unwilling to work for only 1 hour; and crop loss or nonuniform crop maturation would result from potential untimely irrigation of sensitive crops and seedlings.

4. *Pesticide injuries.* Requesters address the protective nature of the requested exception by citing California

Department of Pesticide Regulation (CDPR) records of reported pesticide injuries through the California Pesticide Illness Surveillance Program. The requesters' evaluation of this information alleges that allowing protected workers into treated areas to conduct irrigation activities for an unlimited time after an initial period of prohibited entry does not result in significant risk of illness or injury. Requesters support their exception request with data from DPR's pesticide illness surveillance program, which tracks potential pesticide injuries. They state, "In 1990, there were approximately 2,500 alleged pesticide illnesses/ injuries reported. These included occupational and non-occupational situations. Of these, only 20 cases involved irrigators that were in fields when exposure occurred. Only 1 of the 20 irrigation-related injury cases was classified as 'definitely' related to pesticides. In that case, the worker was determined to be involved in an activity that involved contact with containers contaminated with pesticide residues. In 1990, there were over 2.2 million agricultural pesticide application reports submitted in the state. The rate of irrigator injuries to possible pesticide exposure was 1 in over 110,000 applications."

B. Hawaii Request for Exception

The State of Hawaii provided EPA with an exception request submitted by an agricultural establishment, the Hawaiian Commercial Sugar Company (HC&S). The request related specifically to irrigation activities related to planting new crops, and appeared to comprise full exemption from WPS REI requirements for all agricultural activities described in their request. Requesters specifically cite their desire to return to the pre-WPS standard allowing agricultural workers to enter a field after pesticide application, once dusts have settled and sprays have dried. It is noteworthy that this was not allowed in the legislation delaying implementation of some portions of the WPS, which provided: "Under the exception in section 2, no entry is allowed for the first 4 hours after application of the pesticide. This restriction parallels the requirements in the other exceptions to early entry promulgated in the Worker Protection Standard (WPS) at 40 CFR 170.112."

Requesters state that during seed planting there is a "buffer space" between the cover machine and the herbicide tractor to ensure that agricultural workers are not exposed to pesticide drift. The size of the buffer space is dependent upon the wind