

Methyl Iodide Controls Are Stricter in California

There are major differences between how methyl iodide is used in other states and how it can be used in California with extra, U.S.EPA-approved restrictions that the Department of Pesticide Regulation (DPR) required. The stricter controls are necessary because DPR's allowable exposure levels are lower and more health-protective. For trained workers applying or handling methyl iodide, DPR's controls are designed to keep exposures below 96 parts per billion (ppb), half of what U.S.EPA allows. For others (those not using methyl iodide), DPR rules are designed to keep exposures below 32 ppb averaged over 24 hours, five times lower than the U.S. EPA target level.

Other States Have Fewer and Less Stringent Controls	Use in California With DPR's Stricter Controls
Respiratory protection includes parts but not all of the U.S Occupational Safety and Health Administration program, rules not specific to pesticide use.	<i>Requires users follow all (not just part) of California's comprehensive respiratory protection program specific to pesticides</i> , including fit testing, training, medical evaluation, recordkeeping, equipment maintenance, and an annual evaluation of program effectiveness.
Unprotected workers can re-enter fields sooner, intervals range from 5 to 10 days.	<i>Extended time before unprotected workers can re-enter fields</i> : 14 days must elapse before tarp cutting or perforation; then another 24 hours must elapse after cutting or perforation before tarps can be removed; if tarps are not removed, 24 hours must elapse after cutting or perforation before fieldworkers can enter the field.
Air monitoring required during application; if specific levels detected, work must stop.	<i>Air monitoring required every hour instead of every two, stop-work triggers more protective</i> . If air sample is 1 ppm or more, handler activities must stop and handlers must be removed from application block and buffer zone. (U.S.EPA's stop-work trigger is 50 percent higher.)
Standard tarps allowed.	<i>Prohibits standard tarps</i> , must use virtually impermeable and other highly retentive tarps designed to suppress fumigant movement into air.
Maximum application rate is higher, 175 pounds an acre, depending on method and crop.	<i>Reduced application rates</i> of up to 100 pounds an acre, depending on application method and crop.
More area can be treated at one time – 40 acres, regardless of application method.	<i>Fewer acres can be treated at once</i> , maximum of 20 to 30 acres, depending on the method.
Up to 230 tree-hole sites can be fumigated in a day.	<i>Fewer tree-hole sites can be treated</i> : 25 to 50 sites per acre and 50 to 200 sites per day, depending on which methyl iodide product used
Requires no permit to use methyl iodide; local regulators cannot impose extra restrictions.	<i>Restricted material, requiring a site-specific permit</i> from county agricultural commissioners who can impose extra restrictions tailored to application site.

Smaller buffer zones, ranging from 25 to 500 feet. (Buffer zones surround a pesticide application; pesticides are not applied there and certain activities are restricted for specified periods.)	Larger buffer zones of 100 to 1,400* feet , depending on application method and rate, and treated acreage.
Applications prohibited within one-quarter mile of occupied schools, hospitals and nursing homes.	Applications prohibited within one-half mile of occupied schools, hospitals and nursing homes.
Buffer zones can extend onto adjacent property not under control of applicator.	Buffer zone cannot extend into properties not under the control of the applicator unless written permission is obtained before fumigation from the responsible parties for those properties.
Buffer zones can extend onto public road.	Buffer zones cannot extend onto public roads or areas or any other land for which written consent is not attainable.
No limit on time of application.	Prohibit night applications , which typically result in higher levels of fumigant in the still night air.
Ground water protections are more limited.	Stricter ground water protection: 100-foot buffer zones for unprotected wellheads (or construct berms next to wellheads to prevent runoff into wells); in ground water protection areas vulnerable to leaching, limit the irrigation efficiency to 133% of crop need for six months following fumigation.

* Note: When DPR proposed registration of methyl iodide in April 2010, the proposed maximum buffer zone was 2,500 feet, coupled with a maximum application rate of 125 pounds per acre. Since then, the maximum application rate was reduced to 100 pounds per acre. This, combined with a more accurate recalculation of buffer zone sizes, has reduced the maximum buffer zone to 1,400 feet.