

Restrictions on Methyl Iodide Use

Detailed Comparison of the Federal Product Label, California-Specific Label, and Related Laws and Regulations

	On federal methyl iodide labels	Also in federal pesticide regulation	California label (governs use in California) <i>State-specific labels must include everything on the federal label but states can impose stricter requirements</i>	There are equivalent or stricter controls in DPR's general pesticide regulations (Title 3, California Code of Regulations)
<i>Agricultural worker protection</i>				
Certified applicator must be on site, directly supervise application and keep handlers in line of sight	Y		Same	§6406 requires direct supervision
Respiratory protection requirements including: <ul style="list-style-type: none"> • Fit testing • Training • Medical evaluation • Recordkeeping • Equipment maintenance 	Includes parts (but not all) of the federal OSHA respiratory protection program		<i>DPR label stricter</i> ; requires users follow all (not just part) of California's comprehensive respiratory protection program specific to pesticides; the federal label also does not include an annual evaluation of respiratory protection program in consultation with employees, a requirement of California's program	§6739
Other personal protective equipment (PPE), for example, protective clothing	Y	Y	Same	§6738
Minimum of two workers during handling and application; no one can work alone	Y		Same	
Air monitoring during application and stop-work triggers	Y		<i>DPR label stricter</i> : air monitoring required every hour instead of every two hours, stop-work trigger more protective, 1 ppm compared to U.S. EPA's 1.5 ppm	
Persons not trained and PPE-equipped excluded from application block	Y		Same	
Oral notification of workers	Y	Y	Same	§6618, 6619, 6723, 6761
Posting of treated area with warning signs	Y	Y	Same	§6776
Decontamination supplies on site	Y		Same	§6732, §6734
Reentry, tarp perforation and removal <ul style="list-style-type: none"> • How long tarp must remain on field • Perforation • Removal 	Cutting and removal after 5 to 10 days		<i>DPR label stricter</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	

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<i>Applicator & handler training, certification and licensing</i>				
Applicator training required	Y	Y	Same	§6724
Applicator training by Arysta required	Y		Same	
Applicator certification by state required	Y	Y	Same	§6406
Licensing of applicators required	None		DPR regs are stricter	§6736 Commercial applicators must have a special fumigator license
“Fumigant safe handling” training required to work on site	Y		Same	§6724
Restricted-use pesticide	Federally restricted; no permit needed		<i>DPR rules are stricter:</i> Methyl iodide also a California restricted material, meaning that to use it, a site-specific permit is required from the county agricultural commissioner	
<i>Application method, practice, rate</i>				
Maximum contiguous acreage	40 acres		<i>DPR label stricter:</i> A maximum of 20 to 30 acres, depending on application method	
Limit on number of sites for tree hole fumigation	230 sites per acre per day		<i>DPR label stricter:</i> 25 to 50 sites per acre and 50 to 200 sites per day, depending on which methyl iodide product used	
Application rate	175 lbs/acre		<i>DPR label stricter:</i> a maximum of 100 lbs/acre, depending on application method and crop	
Application methods detailed and described for each product	Y		Same	

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Type of tarp allowed	All types of tarps allowed (no tarp needed for tree-hole fumigation)		<i>DPR label stricter:</i> Only virtually impermeable or other highly retentive tarps that suppress fumigant movement into the air (no tarp required for tree-hole fumigation)	
<i>“Good agricultural practices” mandated to reduce off-gassing, improve safety</i>				
Soil preparation, tilling	Y		Same	
Ensuring optimal soil moisture and temperature	Y		Same	
Appropriate sealing techniques	Y		Same	
Equipment calibration	Y		Same	§6600(c) requires use of methods and equipment suitable to ensure proper application of pesticides; §6604 requires that pesticides be weighed and measured accurately
Weather criteria (applicator must verify no unfavorable weather conditions forecast for 48 hours, for example, inversion layer that would trap fumigant near the ground)	Y		Same	§6600(d) requires pest control be performed under climatic conditions suitable to ensure proper application of pesticides
Time of application	Night applications allowed		<i>DPR label stricter:</i> Prohibits night applications, which typically result in higher levels of fumigant in still night air	
Eliminate pesticide drip when injectors lifted or removed from soil	Y		Same	
<i>Bystander risk mitigation</i>				
Minimum size	25 to 500 ft.		<i>DPR label stricter:</i> 100 to 1,400 ¹ feet	
Document how buffer was calculated	Y		Same	
How long buffer zone must be maintained	Y		Same	

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Applicators must ensure that unprotected workers and bystanders do not enter buffer zone by posting, patrolling, or equivalent means	Y		Same	
Buffer zone extends onto adjacent property not under control of applicator	No special requirement when buffer zones extend to adjacent properties		<i>DPR label stricter:</i> 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 (Florida has similar requirement)	
Buffer zone extends onto public roads or areas	No restrictions		<i>DPR label stricter:</i> Buffer zones cannot extend onto public roads or areas or any other land for which written consent is not attainable (Florida has similar requirement)	
Prohibit overlap with adjacent buffer zone	Y		Same	
Applications prohibited near occupied schools, hospitals and similar sites	1/4 mile		<i>DPR label stricter:</i> 1/2 mile	
Credits available to reduce buffer zone by up to 30% if certain practices followed	Yes		<i>DPR label stricter:</i> Not allowed	

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<i>Environmental protection</i>				
Surface water protection	Y		Same	
Ground water protection	Tarp cutting or removal from broadcast application must take place before noon and when rain is not expected within 12 hours		<i>DPR label stricter to protect groundwater:</i> <ul style="list-style-type: none"> ● 100-foot buffer zones for unprotected wellheads (or alternative, construct berms next to wellheads to prevent runoff from contaminating wellheads) ● In ground water protection areas vulnerable to leaching, limit the irrigation efficiency to 133% of crop need for six months following fumigation 	
<i>Procedures to follow if spill or leak</i>				
	Y		Same	§6780(d) requires an accident response plan for all fumigant use
<i>Site-specific fumigant management plan²</i>				
	Y		Same	

¹**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.

²**Fumigant management plans (FMPs)** are a new federal requirement on all fumigant labels. Prepared before the treatment, these written, site-specific plans are designed to help prevent accidents and misuse. They also will capture emergency response procedures and steps to take in case an accident occurs. Applicators must document general site information; applicator information; application procedures; measurements taken to verify compliance with good application practices; how buffers were determined; worker protection information; procedures for air monitoring; posting; training of applicators supervising fumigations; communication among key parties; hazard communication; record keeping; site-specific response and management activities; emergency plans; and procedures for controlling fumigant releases in case of problems during or after the application. A post-fumigation summary report describing any deviations that may have occurred from the FMP will also be required within 30 days after application.