

**California Department of Pesticide Regulation
Volatile Organic Compound Regulations
Field Fumigation Methods (FFM), FFM Codes for Pesticide Use Reporting, and Emission Ratings**

Regulation Section	Field Fumigation Method	FFM Code	Emission Rating (%)
6447.3	Methyl bromide fumigation methods (with or without chloropicrin)	1101-1190	---
6447.3(a)(1)	Nontarpaulin/shallow/bed	1101*†	100
6447.3(a)(2)	Nontarpaulin/deep/broadcast	1102*	74
6447.3(a)(3)	Tarpaulin/shallow/broadcast – Noble plow	1103	48
6447.3(a)(3)	Tarpaulin/shallow/broadcast – Noble plow – strip	1104*	74
6447.3(a)(3)	Tarpaulin/shallow/broadcast – closing shoes and compaction roller	1105*†	100
6447.3(a)(4)	Tarpaulin/shallow/bed	1106*	100
6447.3(a)(5)	Tarpaulin/deep/broadcast	1107	48
6447.3(a)(5)	Tarpaulin/deep/broadcast – strip	1108*	74
6447.3(a)(6)	Drip system – hot gas	1109*	100
6447.3(a)(3)	Tarpaulin/shallow/broadcast – Noble plow – with tarp eligible for 60% credit	1143	48
6447.3(a)(3)	Tarpaulin/shallow/broadcast – Noble plow – strip – with tarp eligible for 60% credit	1144*	74
6447.3(a)(3)	Tarpaulin/shallow/broadcast – closing shoes and compaction roller – with tarp eligible for 60% credit	1145*	100
6447.3(a)(4)	Tarpaulin/shallow/bed – with tarp eligible for 60% credit	1146*	100
6447.3(a)(5)	Tarpaulin/deep/broadcast – with tarp eligible for 60% credit	1147	48
6447.3(a)(5)	Tarpaulin/deep/broadcast – strip – with tarp eligible for 60% credit	1148*	74
6447.3(a)(6)	Drip system – hot gas – with tarp eligible for 60% credit	1149*	100
	Other label method for methyl bromide (with or without chloropicrin)	1190**	

* Method prohibited within the San Joaquin Valley, Southeast Desert, and Ventura nonattainment areas during May 1 – October 31.

** For use only outside of the May 1 – October 31 time period: or areas outside of the nonattainment areas; or for exempted applications (such as described in Sections 6447, 6448, 6449, 6450, and 6451)

† Method prohibited since 2015

Regulation Section	Field Fumigation Method	FFM Code	Emission Rating (%)
6448.2	1,3-dichloropropene fumigation methods (with or without chloropicrin)	1201-1290	---
6448.2(d)(1)	Nontarpaulin/shallow/broadcast or bed	1201*	49
6448.2(d)(2)	Tarpaulin/shallow/broadcast	1202*	40
6448.2(d)(2)	Tarpaulin/shallow/bed	1203*	46
6448.2(d)(3)	Nontarpaulin/shallow/broadcast or bed/three water treatments	1204	35
6448.2(d)(4)	Tarpaulin/shallow/bed/three water treatments	1205*	45
6448.2(d)(5)	Nontarpaulin/deep/broadcast (without chloropicrin)	1206	29
6448.2(d)(5)	Nontarpaulin/deep/broadcast (with chloropicrin)	1206*	29
6448.2(d)(6)	Tarpaulin/deep/broadcast	1207	25
6448.2(d)(6)	Tarpaulin/deep/bed	1208	33
6448.2(d)(7)	Chemigation (drip system)/tarpaulin	1209*	52
6448.2(d)(5)	Nontarpaulin/deep/strip	1210	29
6448.2(d)(5)	Nontarpaulin/deep/GPS targeted	1211	29
6448.2(d)(5)	Nontarpaulin/24 inches deep/broadcast (without chloropicrin)	1224	19
6448.2(d)(5)	Nontarpaulin/24 inches deep/broadcast (with chloropicrin)	1224*	19
6448.2(d)(5)	Tarpaulin/24 inches deep/broadcast	1225	17
6448.2(d)(5)	Nontarpaulin/24 inches deep/strip (without chloropicrin)	1226	19
6448.2(d)(5)	Nontarpaulin/24 inches deep/strip (with chloropicrin)	1226*	19
6448.2(d)(5)	Nontarpaulin/24 inches deep/GPS targeted (without chloropicrin)	1227	19
6448.2(d)(5)	Nontarpaulin/24 inches deep/GPS targeted (with chloropicrin)	1227*	19
Interim approval‡	Nontarpaulin/tree-hole	1230	14
6448.2(d)(2)	Tarpaulin/shallow/broadcast – with tarp eligible for 60% credit	1242	11
6448.2(d)(2)	Tarpaulin/shallow/bed – with tarp eligible for 60% credit	1243	18
6448.2(d)(4)	Tarpaulin/shallow/bed/three water treatments – with tarp eligible for 60% credit	1245	15
6448.2(d)(6)	Tarpaulin/deep/broadcast – with tarp eligible for 60% credit	1247	8
6448.2(d)(6)	Tarpaulin/deep/bed – with tarp eligible for 60% credit	1248	17
6448.2(d)(6)	Tarpaulin/deep/strip – with tarp eligible for 60% credit	1249	9
6448.2(d)(5)	40% TIF tarpaulin/deep/broadcast	1250	20
6448.2(d)(7)	Chemigation (drip system)/TIF tarpaulin	1259	16
6448.2(d)(5)	40% TIF tarpaulin/24 inches deep/broadcast	1264	14
	Other label method for 1,3-dichloropropene (with or without chloropicrin)	1290††	

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‡ [https://www.cdpr.ca.gov/docs/county/cacitrs/exec/2024/13-d tree hole interim approval letter.pdf](https://www.cdpr.ca.gov/docs/county/cacitrs/exec/2024/13-d%20tree%20hole%20interim%20approval%20letter.pdf)

†† Method prohibited since 2024

Regulation Section	Field Fumigation Method	FFM Code	Emission Rating (%)
6449.1	Chloropicrin fumigation methods	1101-1390	---
6447.3(a)(1)	Nontarpaulin/shallow/bed	1101*†	64
6447.3(a)(2)	Nontarpaulin/deep/broadcast	1102*	64
6447.3(a)(3)	Tarpaulin/shallow/broadcast – Nobel plow	1103	44
6447.3(a)(3)	Tarpaulin/shallow/broadcast – Nobel plow – strip	1104*	64
6447.3(a)(3)	Tarpaulin/shallow/broadcast – closing shoes and compaction roller	1105*†	64
6447.3(a)(4)	Tarpaulin/shallow/bed	1106*	64
6447.3(a)(5)	Tarpaulin/deep/broadcast	1107	44
6447.3(a)(5)	Tarpaulin/deep/broadcast – strip	1108*	64
6447.3(a)(3)	Tarpaulin/shallow/broadcast – Noble plow – with tarp eligible for 60% credit	1143	7
6447.3(a)(3)	Tarpaulin/shallow/broadcast – Noble plow – strip – with tarp eligible for 60% credit	1144	7
6447.3(a)(3)	Tarpaulin/shallow/broadcast – closing shoes and compaction roller – with tarp eligible for 60% credit	1145†	7
6447.3(a)(4)	Tarpaulin/shallow/bed – with tarp eligible for 60% credit	1146	7
6447.3(a)(5)	Tarpaulin/deep/broadcast – with tarp eligible for 60% credit	1147	7
6447.3(a)(5)	Tarpaulin/deep/broadcast – strip – with tarp eligible for 60% credit	1148	7
6448.2(d)(1)	Nontarpaulin/shallow/broadcast or bed	1201*	64
6448.2(d)(2)	Tarpaulin/shallow/broadcast	1202	44
6448.2(d)(2)	Tarpaulin/shallow/bed	1203*	64
6448.2(d)(3)	Nontarpaulin/shallow/broadcast or bed/three water treatments	1204	43
6448.2(d)(4)	Tarpaulin/shallow/bed/three water treatments	1205	43
6448.2(d)(5)	Nontarpaulin/deep/broadcast	1206*	64
6448.2(d)(6)	Tarpaulin/deep/broadcast	1207	44
6448.2(d)(6)	Tarpaulin/deep/bed	1208	44
6448.2(d)(7)	Chemigation (drip system)/tarpaulin	1209	12
6448.2(d)(5)	Nontarpaulin/deep/broadcast/strip	1210	64
6448.2(d)(5)	Nontarpaulin/deep/broadcast/GPS targeted	1211	64
6448.2(d)(5)	Nontarpaulin/24 inches deep/broadcast	1224*	64
6448.2(d)(5)	Tarpaulin/24 inches deep/broadcast	1225	44
6448.2(d)(5)	Nontarpaulin/24 inches deep/strip	1226*	64
6448.2(d)(5)	Nontarpaulin/24 inches deep/GPS targeted	1227*	64

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† Method prohibited since 2015

Regulation Section	Field Fumigation Method	FFM Code	Emission Rating (%)
6448.2(d)(2)	Tarpaulin/shallow/broadcast – with tarp eligible for 60% credit	1242	7
6448.2(d)(2)	Tarpaulin/shallow/bed – with tarp eligible for 60% credit	1243	7
6448.2(d)(4)	Tarpaulin/shallow/bed/three water treatments – with tarp eligible for 60% credit	1245	7
6448.2(d)(6)	Tarpaulin/deep/broadcast – with tarp eligible for 60% credit	1247	7
6448.2(d)(6)	Tarpaulin/deep/bed – with tarp eligible for 60% credit	1248	7
6448.2(d)(6)	Tarpaulin/deep/strip – with tarp eligible for 60% credit	1249	7
6448.2(d)(5)	40% TIF tarpaulin/deep/broadcast	1250	44
6448.2(d)(7)	Chemigation (drip system)/TIF tarpaulin	1259	7
6448.2(d)(5)	40% TIF tarpaulin/24 inches deep/broadcast	1264	44
	Other label method for chloropicrin	1390**	

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Regulation Section	Field Fumigation Method	FFM Code	Emission Rating (%)
6450.1	Metam-sodium and metam-potassium fumigation methods	1401-1490	---
6450.1(d)(1)	Sprinkler/broadcast or bed/one water treatment	1401*	77
6450.1(d)(2)	Sprinkler/broadcast or bed/two water treatments	1402	28
6450.1(d)(3)	Sprinkler/broadcast or bed/three water treatments	1403	21
6450.1(d)(4)	Nontarpaulin/shallow/broadcast or bed/one water treatment	1404*	77
6450.1(d)(5)	Nontarpaulin/shallow/broadcast or bed/two water treatments	1405	28
6450.1(d)(6)	Nontarpaulin/shallow/broadcast or bed/three water treatments	1406	21
6450.1(d)(7)	Chemigation (drip system) tarpaulin	1407	9
6450.1(d)(7)	Chemigation (drip system) nontarpaulin	1408	9
6450.1(d)(8)	Rotary tiller	1409	14
6450.1(d)(8)	Power mulcher	1410	14
6450.1(d)(8)	Soil capping	1411	14
6450.1(d)(9)	Flood	1412*	77
6450.1(d)(12)	Drench	1413	100
6450.1(d)(7)	Chemigation (drip system) tarpaulin – with tarp eligible for 30% credit	1447	9
6450.1(d)(2)	Night 1A.M. start/sprinkler/broadcast or bed/two water treatments	1452*	77
6450.1(d)(10)	1A.M. start/nontarpaulin/shallow/broadcast or bed/two water treatments	1455	13
6450.1(d)(11)	4A.M. start/sprinkler/broadcast or bed/two water treatments	1472	35
	Other label method for metam-sodium and metam-potassium	1490**	

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Regulation Section	Field Fumigation Method	FFM Code	Emission Rating (%)
6450.2	Dazomet fumigation methods	1501-1590	---
	Soil incorporation	1501	17
	Surface application – water incorporation	1502	17
	Other label method for dazomet	1590**	
6451.1	Sodium tetrathiocarbonate fumigation methods	1601-1690	---
	Chemigation (drip)	1601	10
	Chemigation (mini-sprinkler)	1602	10
	Chemigation (flood, basin)	1603	10
	Chemigation (furrow, border)	1604	10
	Chemigation (foggers, jets, misters, other)	1605	10
	Other label method for sodium tetrathiocarbonate	1690**	
6446.1	Methyl iodide fumigation methods	1701-1705	---
	Day tarpaulin/shallow/broadcast	1701***	100
	Day tarpaulin/shallow/bed	1702***	100
	Day tarpaulin/deep/broadcast	1703***	100
	Day chemigation (drip)/tarpaulin	1704***	100
	Day auger-probe	1705***	100

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***Methyl iodide is no longer registered. Codes are for applications that were made in 2011 when the chemical