

Interim Soil Fumigation Methods

Nighttime Applications of Metam-Sodium

Introduction

Pursuant to Title 3, California Code of Regulations (3 CCR) section 6452, DPR has approved interim use of certain metam applications at night within ozone nonattainment areas¹ (NAAs) for volatile organic compounds (VOCs). The methods described below may be used for three years effective May 1, 2008 (expires on April 30, 2011), contingent on the submittal of additional information to more accurately document the emissions from these fumigation methods.

Restrictions

Effective May 1, 2008, expiring on April 30, 2011:

- The metam-sodium night sprinkler method during May-October is approved for use in the Sacramento Metro and South Coast ozone NAAs, but **not** the San Joaquin Valley, Southeast Desert, or Ventura ozone NAAs.
 - The metam-sodium night shallow injection method is approved for use in all five ozone NAAs.
 - These fumigation methods may be used anytime outside of ozone NAAs and within any ozone NAA outside the May-October period, consistent with all VOC fumigation method restrictions.
-

Night sprinkler application, two post-fumigation water treatments

For Night Sprinkler Application with Two Post-Fumigation Water Treatments:

- The field must receive an initial irrigation at a rate of 0.20 inches immediately prior to application
 - The fumigation application must be initiated no earlier than 0100 hrs and be applied at a minimum rate of 0.20 acre-inches/hour
 - Post-fumigation water treatments must be consistent with the requirements described in 3 CCR section 6450.1(d)(2)
-

Continued on next page

¹ A map of California ozone nonattainment areas (NAAs) is available on the DPR Web site at <http://www.cdpr.ca.gov/docs/emon/vocs/vocproj/maps/naa-statemap.pdf>

Nighttime Applications of Metam-Sodium, Continued

Night shank application, two post-fumigation water treatments

For Night Shank Application with Two Post-Fumigation Water Treatments

- Fumigation application must start no earlier than 0100 hours
- Post-fumigation water treatments must be consistent with the requirements described in 3 CCR section 6450.1(d)(2)
- The following fumigation equipment and procedures must be used:
 - i. Before application, thoroughly cultivate the field to remove clods with a disc or spring tooth bar. Soil must contain adequate moisture (as stated in 3 CCR section 6450.1(b)) prior to application.
 - ii. The application equipment must meet the following criteria:
 - The shanks must be set on three bars spaced 12 – 16 inches apart. Each bar must be fitted with shanks spaced 9 – 11 inches apart. The shanks must be staggered to produce an equal effective spacing between all of the shanks on the three bars.
 - Injection depth must be 3 – 4 inches, 6 – 7 inches, and 9 – 10 inches.
 - Nitrogen must be used to purge the system before applicator bar is lifted out of the ground at any time.
 - iii. Compaction equipment
 - The application tool bars must be followed by a ring roller that is at least as wide as the application tool bars, with four gauge wheels controlled by hydraulic cylinders to control depth and or pressure.
 - The ring roller must be followed with a coil packer that is at least as wide as the application tool bars.

New method codes for field fumigation methods

Since both application methods are new, the following will be used for the fumigation code on the Pesticide Use Reporting and the Field Fumigant VOC Emission Allowance forms:

Method code	Emission rating (%)	Regulation section field fumigation method
1452	77	6452 (b)(1) Night Sprinkler/Broadcast or Bed/ Two Water Treatments
1455	28	6452 (b)(1) Night Nontarpaulin/Shallow/Broadcast or Bed/ Two Water Treatments