May 31, 2011 ENF 11-19

TO: County Agricultural Commissioners

SUBJECT: SULFUR DIOXIDE USE IN WINERIES/RESPIRATORY PROTECTION

REQUIREMENTS - ADDENDUM TO ENF 09-12

This addendum updates and supersedes ENF 09-12 concerning the use of sulfur dioxide (SO2) in wineries relative to labeling respiratory requirements.

Background

In June 2009, the Department of Pesticide Regulation (DPR) corresponded with U.S. Environmental Protection Agency (EPA) concerning The Fruit Doctor, Compressed Sulfur Dioxide, EPA Registration No. 11195 -1-AA, relative to an inconsistency in the respiratory protection requirements between the label and the application manual referred to on the label. The label indicates that a supplied air or self-contained breathing apparatus (SCBA) is required in enclosed areas. However, the label is silent on respiratory requirements when the product is used in other areas. The application manual indicates several conflicting requirements which include: defining an action level of 2.0 parts per million (ppm) for instituting respirator use with no mention of being indoors or outdoors (pages 3 and 8), and requiring the use of a National Institute for Occupational Safety and Health (NIOSH) and Mine Safety and Health Administration (MSHA) approved respirator when making gas applications (page 3) in direct conflict with page 8, which indicates supplied air or SCBA is not required when making gas applications if SO2 concentration in the gassing or work area does not exceed 2.0 ppm.

To address the labeling inconsistencies, DPR requested that U.S. EPA require the registrant to amend the label and applicator manual accordingly. In its response, U.S. EPA agreed that the labeling is inconsistent and can easily be misunderstood. They also concurred with some of DPR's proposed text modifications. However, they will not address this problem with the registrant until 2013 when all SO2 fumigation products are scheduled for registration review. Starting in 2013 under registration review, all SO2 labeling will be revised/harmonized at the same time.

Interim Guidance Resolving Labeling Inconsistencies

DPR establishes the following interim guidance for respiratory protection until U.S. EPA, through registration review, requires amendment of registered labeling to resolve the current respiratory requirement inconsistencies.

Handlers:

- 1. Unless an indoor fumigation work area is continuously monitored to ensure SO2 levels measured in the work area do not exceed 2.0 ppm, **respiratory protection is required**.
- 2. If the 2.0 ppm concentration is exceeded at any time in the indoor work area, handlers must wear a supplied-air respirator with NIOSH approval number prefix TC-19C, or SCBA with NIOSH approval number TC-13F.

3. When handlers conduct fumigations in an outdoor work area no respiratory protection and no monitoring is required.

Workers Other Than Handlers

If the 2.0 ppm concentration is exceeded at any time, workers other than handlers working in an indoor fumigation work area must either leave the fumigation work area immediately or wear the same respiratory protective equipment required for handlers.

Continuous Air Concentration Monitoring

There are real-time air concentration monitoring devices available. Without information as to air concentrations associated with handler indoor work activities, respiratory protection is required. However, use of immediate read -out real-time personal monitoring devices to continuously monitor actual exposure levels will alleviate this requirement, provided exposure does not exceed 2.0 ppm.

Available Immediate Read-out Real-time Units

The following samplers are examples of devices that can be used to continuously monitor indoor or outdoor fumigation work sites to ensure SO2 levels measured at the work site do no exceed 2.0 ppm. DPR does not endorse or recommend any particular manufacturer of such devices.

Drager Pac 7000: http://www.draeger.us/Pages/Industry/Pac-7000.aspx

Gasman-SO2: http://www.crowcon.com/pages/products-amp-services/personal-amp-portable-gas-monitors/gasman.php

If you have any questions, please contact the Enforcement Branch Liaison assigned to your county.

Sincerely,

Original Signature by:

Nan Gorder, Ph.D. Chief, Enforcement Branch 916-324-4100