Department of Pesticide Regulation

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MEMORANDUM

TO: Pamela Wofford
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HSM-08004

FROM: Harvard R. Fong, CIH *(original signed by H. Fong)*
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DATE: April 14, 2008

SUBJECT: FOLLOW UP CONCERNING THE PUREAIRE METHYL BROMIDE MONITOR

In a follow-up to my memorandum of January 25, 2008, I visited a walnut processing facility in Tehema County on April 8, 2008. The facility has installed the PureAire real-time methyl bromide remote sensing monitor. The installation appeared designed to function under the severe conditions found in a nut processing/storage facility.

As noted in that previous memorandum, the data as presented would indicate that the PureAire Unit tested could be used as a continuous monitor for methyl bromide concentrations in fumigation chamber control rooms, commodity storage facilities, commodity chilling rooms and other processing/storage areas where methyl bromide-treated commodity may be present. Use of this type of monitoring device would eliminate the need for interval grab sampling of methyl bromide concentrations, as presently required in the Suggested Permit Conditions Methyl Bromide Commodity Fumigation (Suggested Conditions). I would propose that the Suggested Conditions be amended to allow the deployment of this system in lieu of colorimetric tube monitoring. This would affect General Conditions 4, 15, 16, and 19. Areas monitored by this, or equivalent system, should not require colorimetric tube sampling. The following text might be added to the Suggested Conditions, either via page amendment or by correspondence from the Worker Health and Safety (WHS) branch:

Possible Alternative Conditions (addition):

> Real-time remote monitoring – A real-time monitoring system, equipped with remote sensors or sensor intake ports, capable of a minimum detection value of 500 ppb methyl bromide (e.g. PureAire Monitoring System), having a detection lag-time of 2 minutes or less, may be used to monitor areas where methyl bromide air concentrations may immediately exceed DPR guideline values (630 ppb) or where the buildup of methyl bromide from off-gassing commodity may also cause concentration greater than 630 ppb. Such a system must include a warning function to indicate when air concentrations have exceeded 630 ppb and an alarm for when concentrations exceed 5 ppm. The system must also include a

> digital display and be capable of data-logging. Before installation of this type of system, it is strongly recommended that DPR, WH&S be consulted for proper placement of remote sensors/ports. All manufacturer's requirements and recommendations must be followed.

However, to confirm that the PureAire Unit will perform as advertised, I would suggest that those facilities that install these units as replacement for colorimetric tube testing be required to allow the Department of Pesticide Regulation /WHS staff access to the unit and also allow colorimetric tube sampling to confirm the PureAire Unit's monitoring results. Your comments or suggestions on the text for this would be appreciated.