

**Summary: Nomination for Critical Use Exemptions for Methyl Bromide Submitted by the
United States of America on January 24, 2013
[Requests 377,210 kg for 2015 calendar year]**

Nominating Party: United States of America		
1	Descriptive Title of Nomination:	Methyl Bromide Critical Use Nomination for Post Harvest Use for Dates
	Crop Name or Post-Harvest Use	Dates
	Quantity requested in 2015	310 kg
	Reasons alternatives not technically and economically feasible	<p>Phosphine, alone and in combination:</p> <ul style="list-style-type: none"> -- Suitable for fumigating commodities in storage, where fumigation time is not a factor, but generally too slow for treating large commodity volumes that need to be processed rapidly -- Switching to this slower product would require substantial operational changes that are economically infeasible <p>Sulfuryl Fluoride:</p> <ul style="list-style-type: none"> -- Early studies have shown that, under vacuum or atmospheric conditions, sulfuryl fluoride is effective against adult, pupal, and larval stages of insects, but less effective against the egg stage <p>Propylene Oxide:</p> <ul style="list-style-type: none"> -- U.S. EPA has not established tolerances for propylene oxide on dates
2	Descriptive Title of Nomination:	Methyl Bromide Critical Use Nomination For Post Harvest Use on Dry Cured Pork Products
	Crop Name or Post-Harvest Use	Cured meat products, such as country hams
	Quantity requested in 2015	3,240 kg
	Reasons alternatives not technically and economically feasible	<p>Phosphine:</p> <ul style="list-style-type: none"> -- Registered but not efficacious against mites <p>Heat:</p> <ul style="list-style-type: none"> -- Would affect the final product (rancidity, cooking) <p>Sulfuryl Fluoride:</p> <ul style="list-style-type: none"> -- Registered but not effective against ham mites
3	Descriptive Title of Nomination:	Methyl Bromide Critical Use Nomination for Preplant Soil Use for Strawberries Grown for Fruit in Open Fields
	Crop Name or Post-Harvest Use	Strawberry production in California
	Quantity requested in 2015	373,660 kg
	Reasons alternatives not technically and economically feasible	<p>1,3-D:</p> <ul style="list-style-type: none"> -- In California, township caps currently restrict the use on approximately 40-62% of total strawberry land. -- Several counties with a history of three years of 1,3-D/chloropicrin have become infested with increasing populations of <i>Macrophomina</i> and <i>Fusarium</i>, which cause increasing damage and risk inoculum build-up <p>Chloropicrin:</p> <ul style="list-style-type: none"> -- The use of 100% chloropicrin has recently been allowed but a transition period is necessary to gain technical expertise to reduce bystander exposure. <p>Metam Sodium:</p> <ul style="list-style-type: none"> --A small-scale experiment conducted in Israel (Zveibil et al., 2012) indicated that metam-sodium may be an effective alternative to methyl bromide for managing <i>Macrophomina phaseolina</i> but the experiment included solarization which may not be applicable to California, has not been repeated, and has not been tested on demonstration-size scale. <p>Steam:</p>

		<p>--Steam treatment of soil may be too slow a process for application to entire production fields, with a rate of less than a hectare per day. Economic and practical difficulties are being investigated further.</p> <p>Anaerobic Soil Disinfestation:</p> <p>-- Further study is required. State regulations for nitrates into groundwater and nitrous oxide into the air will also be considerations for full commercialization. Some costs may be higher due to possible lower yields and a detailed economic analysis of ASD systems is in progress</p> <p>Substrate Systems:</p> <p>-- Technological and cost aspects must be considered, including: 1) the process is labor intensive, 2) there is a complex fertilizer/irrigation regime that must be optimized, 3) there are high costs and issues of availability and effectiveness of substrates and fabrics, 4) growers must adopt a different 4-row bed system (instead of a 2-row system), and 5) adjustments must be made to fertilizer injectors and other equipment.</p>
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