

NOSB COMMITTEE RECOMMENDATION

Form NOPLIST1. Committee Transmittal to NOSB

For NOSB Meeting: **March 2007**

Substance: **Pelargonic Acid**

Committee: Crops Livestock Handling Petition is for: **Pelargonic acid for use as an herbicide in farmstead maintenance (roadways, ditches, right of ways, building perimeters) & ornamental crops on the National List § 205.601(b)(1)**

A. Evaluation Criteria (Applicability noted for each category; Documentation attached) **Criteria Satisfied? (see B below)**

- | | | | |
|--|---|--|---|
| 1. Impact on Humans and Environment | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| 2. Essential & Availability Criteria | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | N/A <input type="checkbox"/> |
| 3. Compatibility & Consistency | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | N/A <input type="checkbox"/> |
| 4. Commercial Supply is Fragile or Potentially Unavailable as Organic (only for 606) | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input checked="" type="checkbox"/> |

B. Substance Fails Criteria Category: 2 & 3 Comments: See Evaluation Criteria Category 2 Questions 7, 9, 10 and Category 3 Question 7c

C. Proposed Annotation (if any): _____
 Basis for annotation: To meet criteria above: _____ Other regulatory criteria: _____ Citation: _____

D. Recommended Committee Action & Vote (State Actual Motion): To add Pelargonic acid to the National List of synthetic substances allowed in organic crop production as an herbicide for use in farmstead and ornamental crop use.

Motion by: Moyer Seconded: Engelbert Yes: 0 No: 4 Absent: 2 Abstain: 0

Crops	X	Agricultural		Allowed ¹	
Livestock		Non-Synthetic		Prohibited ²	
Handling		Synthetic	X	Rejected ³	X
No restriction		Commercially Un-Available as Organic ¹		Deferred ⁴	

1) Substance voted to be added as "allowed" on National List to § 205. _____ with Annotation (if any) _____

2) Substance to be added as "prohibited" on National List to § 205. _____ with Annotation (if any) _____

Describe why a prohibited substance: _____

3) Substance was rejected by vote for amending National List to § 205.601(b)(1) Describe why material was rejected: 'Soap-based herbicide' is the only category of synthetic herbicides allowed in the provisions of the OFPA. Could not classify material as a soap.

4) Substance was recommended to be deferred because _____
 _____ If follow-up needed, who will follow up _____

E. Approved by Committee Chair to transmit to NOSB:

Gerald Davis
Committee Chair

2/19/2007
Date

NOSB EVALUATION CRITERIA FOR SUBSTANCES ADDED TO THE NATIONAL LIST

Category 1. Adverse impacts on humans or the environment? Substance - Pelargonic Acid

Question	Yes	No	N/A¹	Documentation (TAP; petition; regulatory agency; other)
1. Are there adverse effects on environment from manufacture, use, or disposal? [§205.600 b.2]	X			High aquatic organism bio-concentration potential. Slight toxicity to fish, amphibians, and zooplankton. TAP 202-212
2. Is there environmental contamination during manufacture, use, misuse, or disposal? [§6518 m.3]		X		Specific information not found (TAP 172) although the potential for misuse exists. TAP 188-190
3. Is the substance harmful to the environment? [§6517c(1)(A)(i);6517(c)(2)(A)i]	X			See Question #1
4. Does the substance contain List 1, 2, or 3 inerts? [§6517 c (1)(B)(ii); 205.601(m)2]	X			Material itself is listed on EPA List 3. TAP 76
5. Is there potential for detrimental chemical interaction with other materials used? [§6518 m.1]				No information provided to answer question.
6. Are there adverse biological and chemical interactions in agro-ecosystem? [§6518 m.5]		X		Unlikely if used properly. TAP 231-236
7. Are there detrimental physiological effects on soil organisms, crops, or livestock? [§6518 m.5]	X			Toxic to worms, bacteria, protozoa, and algae under improper or excessive use. TAP 241-247
8. Is there a toxic or other adverse action of the material or its breakdown products? [§6518 m.2]	X			See Question #1 and #10
9. Is there undesirable persistence or concentration of the material or breakdown products in environment?[§6518 m.2]		X		TAP 310-313
10. Is there any harmful effect on human health? [§6517 c (1)(A)(i) ; 6517 c(2)(A)i; §6518 m.4]	X			Material is EPA Toxicity Category II for eye irritation and Category III for dermal and inhalation effects. TAP 252-257 Occupational exposure may occur through dermal/inhalation contact at workplaces where produced or used. TAP 318-340
11. Is there an adverse effect on human health as defined by applicable Federal regulations? [205.600 b.3]			X	
12. Is the substance GRAS when used according to FDA's good manufacturing practices? [§205.600 b.5]			X	
13. Does the substance contain residues of heavy metals or other contaminants in excess of FDA tolerances? [§205.600 b.5]			X	

¹If the substance under review is for crops or livestock production, all of the questions from 205.600 (b) are N/A—not applicable.

Category 2. Is the Substance Essential for Organic Production? Substance - Pelargonic Acid

Question	Yes	No	N/A ¹	Documentation (TAP; petition; regulatory agency; other)
1. Is the substance formulated or manufactured by a chemical process? [6502 (21)]	X			TAP 135-149
2. Is the substance formulated or manufactured by a process that chemically changes a substance extracted from naturally occurring plant, animal, or mineral, sources? [6502 (21)]	X			TAP 158-160
3. Is the substance created by naturally occurring biological processes? [6502 (21)]		X		TAP 165-167
4. Is there a natural source of the substance? [§205.600 b.1]			X	
5. Is there an organic substitute? [§205.600 b.1]			X	
6. Is the substance essential for handling of organically produced agricultural products? [§205.600 b.6]			X	
7. Is there a wholly natural substitute product? [§6517 c (1)(A)(ii)]	X			TAP 345-356
8. Is the substance used in handling, not synthetic, but not organically produced? [§6517 c (1)(B)(iii)]			X	
9. Is there any alternative substances? [§6518 m.6]	X			TAP 345-356
10. Is there another practice that would make the substance unnecessary? [§6518 m.6]	X			TAP 375-391

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Category 3. Is the substance compatible with organic production practices? Substance - Pelargonic Acid

Question	Yes	No	N/A ¹	Documentation (TAP; petition; regulatory agency; other)
1. Is the substance compatible with organic handling? [§205.600 b.2]			X	
2. Is the substance consistent with organic farming and handling? [§6517 c (1)(A)(iii); 6517 c (2)(A)(ii)]	X	X		Yes, if the material can be classified as a soap-based herbicide for farmstead and ornamental crop use. TAP 58 No, if the material does not meet the accepted criteria in order to be classified as a soap.
3. Is the substance compatible with a system of sustainable agriculture? [§6518 m.7]	X			Material is relatively non-toxic, non-recalcitrant chemical control of weeds.
4. Is the nutritional quality of the food maintained with the substance? [§205.600 b.3]			X	
5. Is the primary use as a preservative? [§205.600 b.4]			X	
6. Is the primary use to recreate or improve flavors, colors, textures, or nutritive values lost in processing (except when required by law, e.g., vitamin D in milk)? [205.600 b.4]			X	
7. Is the substance used in production, and does it contain an active synthetic ingredient in the following categories:				
a. copper and sulfur compounds;		X		
b. toxins derived from bacteria;		X		
c. pheromones, soaps, horticultural oils, fish emulsions, treated seed, vitamins and minerals?		X		See Question #2 above. The material is classified as a 9 carbon chain carboxylic acid synthetically produced through ozonolysis. Additional information was not found that would justify classifying it as a soap
d. livestock parasiticides and medicines?		X		
e. production aids including netting, tree wraps and seals, insect traps, sticky barriers, row covers, and equipment cleaners?		X		

¹If the substance under review is for crops or livestock production, all of the questions from 205.600 (b) are N/A—not applicable.

Category 4. Is the commercial supply of an agricultural substance as organic, fragile or potentially unavailable? [§6610, 6518, 6519, 205.2, 205.105 (d), 205.600 (c) 205.2, 205.105 (d), 205.600 (c)]

Substance – Pelargonic Acid

Question	Yes	No	N/A	Comments on Information Provided (sufficient, plausible, reasonable, thorough, complete, unknown)
1. <u>Is the comparative description provided</u> as to why the non-organic form of the material /substance is necessary for use in organic handling?			X	
2. Does the current and historical industry information, research, or evidence provided explain how or why the material /substance cannot be obtained organically in the appropriate form to fulfill an essential function in a system of organic handling?			X	
3. Does the current and historical industry information, research, or evidence provided explain how or why the material /substance cannot be obtained organically in the appropriate quality to fulfill an essential function in a system of organic handling?			X	
4. Does the current and historical industry information, research, or evidence provided explain how or why the material /substance cannot be obtained organically in the appropriate quantity to fulfill an essential function in a system of organic handling?			X	
5. Does the industry information provided on material / substance non-availability as organic, include (but not limited to) the following:			X	
a. Regions of production (including factors such as climate and number of regions);				
b. Number of suppliers and amount produced;			X	
c. Current and historical supplies related to weather events such as hurricanes, floods, and droughts that may temporarily halt production or destroy crops or supplies;			X	
d. Trade-related issues such as evidence of hoarding, war, trade barriers, or civil unrest that may temporarily restrict supplies; or			X	
e. Are there other issues which may present a challenge to a consistent supply?			X	