



April 7, 2015

Ms. Michelle Arsenault  
National Organic Standards Board  
USDA-AMS-NOP  
1400 Independence Avenue, SW  
Room 2648-So., Ag Stop 0268  
Washington, DC 20250-0268

**Docket:** AMS-NOP-15-0002

**RE: Handling Subcommittee – 2017 Sunset Summaries for 206.605 (Non-agricultural)**

Dear Ms. Arsenault:

Thank you for this opportunity to provide comment to the National Organic Standards Board on its 2017 Sunset Review process and the summaries posted for the spring 2015 meeting.

The Organic Trade Association (OTA) is the membership-based business association for organic agriculture and products in North America. OTA is the leading voice for the organic trade in the United States, representing organic businesses across 50 states. Its members include growers, shippers, processors, certifiers, farmers' associations, distributors, importers, exporters, consultants, retailers and others. OTA's Board of Directors is democratically elected by its members. OTA's mission is to promote and protect the growth of organic trade to benefit the environment, farmers, the public and the economy.

OTA thanks NOSB for carefully considering each handling input scheduled to sunset in 2017. It's critical that NOSB hear from certified farmers and handlers on whether these inputs are consistent with and essential to organic production and handling, or whether there are other effective natural or organic alternatives available.

To help facilitate a thorough comment and review process, OTA created an electronic survey for each input under review for 2016 and 2017. The surveys are user-friendly, available to **every NOP certificate holder**, and include 7-10 questions addressing the **necessity (farm and livestock) or essentiality (handling)** of the National List input under review. The names of the companies submitting the information are confidential (not disclosed to OTA). To ensure wide distribution of the surveys beyond OTA membership, OTA worked with Accredited Certifying Agencies (ACAs) to distribute the survey links to all of their certified clients as well as to targeted clients they know are using the inputs under review. OTA also worked through its Farmers Advisory Council (FAC<sup>1</sup>) to help assist in distribution to NOP certified farmers.

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<sup>1</sup> OTA's Farmers Advisory Council was established in 2013 to formalize two-way communication between OTA and member producers as well as regional organic producer organizations across the United States. Through dialog and input, FAC gives organic farmers a voice to directly influence OTA's policy and provides an avenue for OTA to share information and advocacy work with this stakeholder group.

Given the short comment period (less than 30 days), OTA left the surveys open beyond the comment deadline. We are still in the process of collecting information from certified handlers and we intend to deliver additional information in person at the meeting in La Jolla, CA. The comments submitted at this time include everything we have received through March 31.

**National List Criteria**

Materials that have been placed onto the National List for use in handling should remain on the National List if: 1) they are still essential to and compatible with organic production and handling practices; 2) there are no commercially available alternative materials (natural, organic) or practices; and 3) no new information has been submitted demonstrating adverse impacts on humans or the environment (OFPA SEC. 2118 [7 U.S.C. 6517 and 6518] National List). Furthermore decisions must be transparent, non-arbitrary, and based on the best current information and in the interest of the organic sector and public at-large.

Based on survey results and/or feedback received directly by members, the following materials meet the essentially criteria listed above. We are not aware of any new information regarding adverse impacts on humans and on the environment:

**Nonagricultural nonsynthetic (205.605(a)) Nonsynthetic (nonagricultural): Allowed as ingredients in or on processed products labeled “organic” or “made with organic (specified ingredients or food group(s)).**

Substance	Survey Information
Citric Acid	-Our suppliers use citric acid in canned artichoke hearts, water chestnuts, pimentos, tomatoes and orange peel. Citric acid is use to adjust the pH of many of these ingredients as well as maintaining the quality and control of microorganisms. Alternate acids are not more natural and do not give the same flavor profile. We always confirm that the citric acid used by our suppliers is produced by microbial fermentation of carbohydrate substances. -Used for organic fruit processing and spreads as a pH adjuster. Company has been certified for 13 years. Products are sold in all 50 states. There are no other alternatives that will work. Citric acid is critically essential to our organic processing operation.
Lactic Acid	Lactic acid is used in a soy based cheese alternate that we currently use. The lactic acid is present for flavor development and control of microorganisms. Alternates are not more natural and do not have the same flavor profile.
Bentonite	Companies responding have been certified for up to 13 years. Products are sold in all 50 states and Canada. Bentonite is used for organic juice concentrate processing as a filtering aid. No other natural or organic sources are known with the same specific function. This input is rated as critically essential to organic processing. The loss of allowance would result in loss quality and loss of sales.
Calcium Carbonate	Calcium carbonate is used as a calcium source in soy based cheese alternate. Because the soy based cheese alternate is a substitute for milk based cheese, our supplier would like to be able to provide a similar calcium level for nutritional purposes. Alternates are not more natural and may change the flavor of the soy based cheese alternate.
Calcium Chloride	-At times, calcium chloride is used by our suppliers as a firming agent in beans and brined vegetables. Substitutes may be available but they are not more natural and so we have not tested them. -Used in organic specialty feeds as a calcium source for livestock. Although other forms exist, calcium carbonate is well understood, and almost universally accepted as an approved

	<p>feed additive - globally. Board should recommend to retain its continued use. Loss of this input would result in decreased calcium availability, which will reduce Organic livestock performance and production output. This input is critically essential.</p>
Dairy Cultures	<p>Used in cheese and yogurt products as a stabilizer, flavor and acidifier. Products are sold in all 50 states with some export. Companies responding have been certified for 5-20 years. The loss of dairy cultures would result in a halt in production. All companies said they would not be able to produce organic products. Dairy cultures are critically essential to the processing of organic products.</p>
Diatomaceous Earth	<p>-Diatomaceous earth is used to remove insolubles and impurities in solutions. We do not use this directly but it is used by some of our suppliers. Diatomaceous earth improves the quality, flavor and appearance of ingredients without leaving a residual in the ingredient. Applications where used include vinegar and sugar processing.</p> <p>-Used as a filtering aid for juice concentrates. It's used in combination with other filtering aids such as bentonite and perlite. All have a specific use and must remain on the National List. There are no other alternatives. This is critically essential to organic processing.</p>
Enzymes	<p>-Microbial enzymes are used in the manufacture of cheese as a rennet substitute. The only known substitutes are derived from animal sources or through genetic engineering. We would not be able to use cheese in our organic products if microbial enzymes were not approved for use.</p> <p>-Used as a processing aid for organic juice concentrates. Company has been certified for 13 years. Products are sold in all 50 states. There are no other alternatives that will work. Enzymes are critically essential to our organic processing operation. Ancillary substances include: glycerol carrier 45%, stabilizing agent sodium benzoate &lt;5g/kg &amp; NaCl 80-100 g/kg</p> <p>-Used in non-dairy beverages, sold in all 50 states. Certified for 15 years. No known alternatives, organic is not available. Products would be unacceptable to consumers if this material was removed. Critically essential.</p> <p><b>Ancillary Substances</b></p> <p><b>Anti-caking &amp; anti-stick agents:</b> calcium silicate, calcium stearate, magnesium silicate/talc, magnesium stearate, magnesium sulfate, silicon dioxide, sodium aluminosilicate</p> <p><b>Carriers and fillers:</b> ammonium sulfate, autolyzed yeast/yeast extracts, barley grain, barley meal, calcium phosphate, calcium acetate, calcium carbonate, calcium chloride, calcium sulfate, corn flour, corn grain, corn steep liquor (powder), corn starch, dicalcium phosphate, dextrin, dextrose, dried glucose syrup, ethyl alcohol, flour, glucose, D-glycerol, glycol, inulin, lactose, lactic acid, maltodextrin, maltose, mannitol, microcrystalline cellulose, milk, mineral oil, potassium chloride, palm oil, potato starch, propylene, propylene glycol, purity gum (starch), rice grain, rice protein, saccharose, sorbitol, soy flour, soy oil, starch, sucrose, sunflower oil, stearic acid, trehalose, vegetable oil, water, wheat (flour/grain/starch)</p> <p><b>Preservatives:</b> alpha (hops) extract, ascorbic acid, benzoic acids and their salts, calcium propionate, citric acid, potassium chloride, potassium phosphate, sodium acetate, sodium chloride, sodium benzoate, sodium propionate, sodium sulfate, sorbic acid and its salts, stearic acid, tannic acid, trisodium citrate, zinc sulfate</p> <p><b>Stabilizers:</b> betaine (trimethylglycine), glucose, glycerol, maltodextrin, sodium chloride, sodium phytate, sorbitol, sucrose</p> <p><b>pH control, buffers:</b> acetic acid, citric acid anhydrous, sodium citrate, sodium phosphate, trisodium citrate</p>
Flavors	<p>-Products are sold in all 50 states for all responders, and some throughout the world.</p> <p>-Used in the production of organic flavors. Products are sold in all 50 states. They are</p>

essential and certain flavors are not available in organic form. Our company only uses organic flavors, which rely in some cases on the use of natural flavor isolates. Flavors are critically essential to our organic products.

-Used in soup. Products are sold in all 50 states. Unaware of organic alternatives that would work. Commercial availability should apply to natural flavors. It would be appropriate to retain all flavors on the National List if commercial availability were assigned. Flavors are essential to our organic products.

-We are doing our due diligence to validate organic flavors in our certified products. We have converted a portion of the formulas and continue to reevaluate as more organic flavors come available.

-If available, have you conducted research (e.g. R & D trials) on the use of allowed natural or organic alternatives? Answers: Yes, Yes, No, No known alternatives, Yes. Organic flavors are used in our lab when the quality and form will match the need. We only use organic flavors. No.

-We use some organic flavors, but because flavors are unique, we cannot replace most of our flavors with organic ones.

-Natural flavors are used in all of our products. Removing natural flavors from the list or only allowing organic forms would lead to a decrease in product quality.

-Flavors should not be sunset because we have custom flavors that cannot be manufactured with organic ingredients only.

There would be major economic effects if flavors were removed from the National List. Flavors can make the difference between success and a failure.

-Never researched the use of organic flavors further as this was deemed acceptable.

-Organic flavors are used where they can provide the same quality and form. However, often quality and form can only be met with Natural Flavors. Only ones meeting the NOP annotations are used at our facility.

-Organic extracts, organic essential oils, organic essences and organic distillates are available. Organic compound flavors cannot be compared from one formulation to the next due to the highly variable composition of these products.

-Certified organic flavors are available but scarcely.

-It would be appropriate to assign commercial availability to Natural Flavors. For many types of flavors, there is not an acceptable organic alternative that matches the flavor profile and function. Specific examples include vanilla, chocolate, coffee, dairy and many others.

-Assigning commercial availability would help locate new product sources easier.

It would be appropriate to assign commercial availability to natural flavors because:

- Not all flavors are available in organic form.
- In order to allow their use the absence of an organic flavor of the same flavor profile and physical-chemical specification.
- Organic flavors are not as strong as natural flavors
- We only use certified organic flavors.

-Most of the compounded natural flavors that are certified organic qualified only by virtue of containing a minimum of 95% organic solvent such as organic ethyl alcohol. The active flavoring substances are not organic. Compound flavorings should remain on 205.605 because the active flavoring constituents are not available as organic (non-agricultural). Obtaining certification for a compound flavor based upon the % of organic solvent used is not in keeping with the spirit of the NOP. Affirm that compound flavors are non-agricultural by retaining them on the National List.

-Is the supply of organic flavors sufficient? Unknown. Unknown. Unsure. Limited. No.

-Given the availability of some organic flavors, do you think that commercial availability should apply to the use of natural flavors in organic products (i.e. use organic when

	<p>commercially available in quantity, quality and form)?</p> <ul style="list-style-type: none"> <li>• Absolutely –agree!</li> <li>• Yes</li> <li>• Yes</li> <li>• No</li> <li>• No. Even though a flavor may be available in organic form. The organic form may not provide the quality needed for the final gummy product.</li> <li>• Commercial availability should only apply to extracts, essential oils, essences and distillates, which are derived from a single agricultural product (eg, orange oil, vanilla extract). It cannot apply to compound flavors because they vary greatly in flavor profile and physical-chemical specification from one product to another.</li> <li>• Yes</li> <li>• Yes</li> <li>• Yes</li> </ul>
Nitrogen	<p>-Liquid nitrogen is used in cryogenic cooling/freezing in the frozen food industry. Nitrogen is currently used by some of our suppliers. The nitrogen dissipates into the air after freezing and does not remain in the food product.</p> <p>-Used as a packaging aid for canning. It keeps the can firm by displacing air. Products are sold throughout the states. There are no alternatives available or other management practices that would work in place. Nitrogen is critically essential our organic business.</p>
Perlite	<p>Companies responding have been certified for up to 13 years. Products are sold in all 50 states and Canada. Perlite is used for organic juice concentrate processing as a filtering aid. No other natural or organic sources are known. This input is rated as critically essential to organic processing. The loss of allowance would result in loss quality and loss of sales.</p>
Potassium chloride	<p>Company responding has been certified for up to 15 years. Used in Cheese and Cheese and Dairy Based Powders. Finished products that contain our ingredients are sold in all US states and around the world. This input functions as a salt replacer. The loss of this material would limit our ability to make reduced sodium products and would likely eliminate the line altogether. This input is essential organic processing due to the lack of an alternative.</p>
Potassium iodide	<p>Companies responding have been certified for up to 13 years. Products are sold in all 50 states. Potassium iodide is used at our facility as a nutritional source of iodine. Not available in the same form and quality needed to ensure RDAs are safely met at the approved shelf-life. Alternatives are not available. Removing this ingredient would no longer allow products to be fortified with the iodine nutrient. This would change the quality and functionality of the product. By removing the nutrient for the product, there would be a loss of effectivity and loss of sales. This would impact the economic health of the operation. Essential.</p>
Sodium bicarbonate	<p>Sodium bicarbonate is a component of our baking powder that is used in a wide range of baked items. There are no more natural substitutes that give a similar functionality.</p>
Waxes (Carnauba)	<p>Fruit snacks. Certified since 2002. Sell products in all 50 states. Functions as a polish and moisture barrier; prevents stickiness. We are committed to using organic where we can. If it were removed we would have a sticky product which results in low productivity during pack out which results in an increase in cost of goods and low consumer acceptance. Critically essential. No ancillary substance response.</p>
Yeast	<p>-We use Baker's Yeast is used for leavening and flavor development in a wide range of baked products and savory foods. We understand organic versions are becoming available however the range is limited and we request that this remain on the National List under the ingredient category is developed.</p> <p>-Autolyzed yeast is used in a limited number of our products for flavor development in</p>

	<p>foods. It allows for the development of foods with good flavor and lower amounts of sodium. We understand organic versions are becoming available however the range is limited and we request that this remain on the National List under the ingredient category is developed.</p> <p>-We use nutritional yeast for flavor development in addition to adding nutritional components to foods. We understand organic versions are becoming available however the range is limited and we request that this remain on the National List under the ingredient category is developed.</p> <p>- Used for organic gravies, pizza, soups, breads, rolls and frozen entrees. Bakers yeast is used for leavening, yeast extracts for flavor. Products are sold in all 50 states with export to many countries. Organic yeast is available but not gluten free versions. MSG is an alternative, but it is not acceptable to most consumers, and it is not allowed in organic products. The loss of yeast would result in millions of dollars lost in sales. We could not produce gluten free leavened products without it, and the flavor of many products would be impaired without the yeast extracts. Yeast is critically essential to the processing of our organic products.</p> <p>-Nutritional yeast used as Specialty Feed additive. Company is 8 years certified. Products are sold throughout the US and in EU member states. The Allowed yeast for Animal Feeds are identified in the AFCCO Official Publication 2015 page 455. I can't comment on the Organic availability of this listing. We are always conducting research, prior to using a new component; however, Organic Certified alternatives are not always available. Also we could not comment on the organic status of the allowed yeasts types as listed in the AFFCO publication. Nor do we have a listing of ancillary substances for this list.</p> <p>-Used for flavoring in Cheese; Cheese and Dairy Based Powders. Company is 15 years certified. Products are sold throughout the U.S and around the world. We do use Organic yeast in products. If yeast were removed from the NL it would only affect our products should there be a shortage of Organic Yeast. On a scale of 1 to 10, yeast rates 5 for essentiality.</p>
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**205.605(b) Synthetic: Nonagricultural (nonorganic) substance allowed as ingredients in or on processed products labeled “organic” or “made with organic (specified ingredients or food group(s)).**

Substance	Survey Information
Acidified sodium chlorite	<p>ASC is under consideration as a sprouting seed disinfection treatment, as a possible alternative to the 20,000 ppm calcium hypochlorite that is currently recommended by the FDA. If ASC is taken off the allowed list, there will be no incentive to consider it as an alternative to 20K chlorine in organic production. In terms of "allowed equally effective" organic or natural alternatives, I don't know of any presently. There has been some promising peer-reviewed research on competitive exclusion, but presently no "allowance" for this approach. There aren't any alternative management practices, not to my knowledge- seed can become contaminated from a number of environmental sources, even using GAPs. We are not presently using it, since it has not been approved for our specific use by EPA or FDA- but it is under consideration. If we could use it, research results suggest it could significantly enhance sprout safety. If it is not allowed, then things will stay pretty much the way they are now: periodic recalls, sporadic outbreaks, two major retailers not carrying sprout products, and generally lousy safety image. ASC is effective at 200 ppm, compared to 20,000 ppm calcium hypochlorite, which is not as effective. Allowance of ASC would arguably result in a lower negative environmental impact. The sprout industry continues to be economically depressed by high-profile outbreaks and recalls. The use of ASC could improve confidence, and contribute to</p>

	significant growth of the sprout industry. Essential to critically essential.
Ammonium bicarbonate	Used in certified organic crackers. Certified more than 10 years. We sell in all states. No known alternatives. Loss of this material would impact proper texture of product and result in loss of business. This material is critically essential to the processing of our organic products.
Ascorbic acid	Ascorbic acid is used by our supplier of pineapple juice to maintain color/reduce browning. There are no other more natural color preservatives for pineapple juice which naturally contains ascorbic acid. Quality and marketability of products would be impacted without ascorbic acid leading to loss of sales. Critically essential. Ascorbic Acid is used in many of our products as a Vitamin C source. It is stable and allows our products to meet the daily RDA for Vitamin C in a quality product. Organic and Natural forms of Vitamin C do not have the shelf-life or allow for the concentrations of Vitamin C needed in our products. Many of our certified products contain Ascorbic Acid as a Vitamin C source. This provides a good way for people to get the Vitamin in a certified supplement form. Should it be removed from the list, the products would not have the same function. Vitamin C is a large part of our business. Should it be removed, the economic health of our company would suffer.
Calcium hydroxide	Calcium hydroxide/lime has been used for centuries to dissolve the pericarp (outer coating) of corn to improve its ability to stick together. This processing allows for the manufacture of corn tortillas. Excess calcium hydroxide is removed from the corn in the process leaving only a small residual of calcium. Calcium hydroxide is also used by a few of our suppliers to assist in removing impurities from solutions. For example, calcium hydroxide can be used in the manufacture of cane juice to coagulate proteins and removed unwanted carbohydrates.
Calcium phosphates (mono, di & tri)	Mono-calcium phosphate is a component of our baking powder, which is used in a wide range of products. There is no other more natural substitute for leavening when yeast is not appropriate.
Carbon dioxide	Carbon dioxide is used by some of our suppliers in the control of pests in the storage of grains and rice. It is used both for freezing foods and also for accelerated cooling, a critical food safety procedure. The carbon dioxide dissipates into the air after the cooling/freezing is complete and does not remain in the food product. We do not currently use carbon dioxide in manufacture but would like to have this as an option in the future should we need additional cooling on new products.
Chlorine materials	Calcium hypochlorite, chlorine dioxide and sodium hypochlorite are used as algicides, disinfectants and sanitizers in the handling and processing of organic crops. These are critical for food safety purposes. Along with our own use in sanitation, our suppliers use chlorine in the cleaning of equipment and food contact surfaces, again a critical food safety activity. -Used as a sanitizing agent in most organic processing facilities. Other sanitizers do not work as well. Poor sanitation could lead to serious illness. Dead consumers don't buy organic products. Critically essential. -This ingredient is used in our cleaner and, along with sodium hydroxide, provides a very high quality cleaning of the system. No alternatives are available that meet the same functionality and quality of cleaning that is possible with this ingredient. Any quality issue due to a lesser quality of cleaning would effect all products at our facility. Any quality or food safety issue due to using a lesser quality alternative ingredient would devastatingly effect the economic health of our facility. No alternatives exist that have proven to have the log reductions needed. Good Agricultural Practices (GAP) can help, but are not a 100% guarantee to prevent contamination from pathogens. Without this material we would have difficulties

	<p>complying with FSMA and more consumers could become ill. Critically essential.</p> <p>- SODIUM HIPOCHLORITE IS used to control the PH in water for a triple wash system that washes cut product, which works with Citric acid. We conduct 10 days shelf testing per customers request and products not washed do not survive 8-10 day study. With chemicals we have had 12-15 days good, edible shelf life. Without the listing for chlorine, product might not make it to 10-day shelf life as required by each vendor and would need to change to 6 day shelf for some products.</p>
Ferrous sulfate	<p>Used in Organic Certified Animal Feeds. Certified for 4 years. Selling products in 49 states. Used in specialty feeds. Not aware of any alternative management practices that would eliminate the need for the specific substance. Without this substance organic livestock production performance would drop. Substance is critically essential to organic processing of livestock feed.</p>
Glycerides (mono & di)	<p>Mono and diglycerides are used in drum drying of certain ingredients such as potato flakes. It prevents the potatoes from sticking to the drum. Potato flakes have unique water absorption properties due to their surface area. For this reason, drum dried potato flakes are a preferred source for water binding function.</p>
Glycerin	<p>-Organic baked goods and certified organic personal care products. Also used in many flavors. Over 15. 50 states and many countries. Used as a humectant and solvent. We have not conducted research (e.g. R &amp; D trials) on the use of allowed natural or organic alternatives. Loss of this material would result in impaired quality and marketability of products and loss of sales. Critically essential.</p> <p>- Glycerin is used as an emulsifier in most of our natural flavors. Its use is critical in both quality and function of the flavors and our product. Organic or natural is not available in the quality/form needed. We have conducted research trials. The flavors of our products are a large contributor to high quality standards. If glycerin was removed from the list, all of our flavor profiles may change. This could create a decrease in quality. If organic glycerin must be used for all flavors, this would drastically increase the cost of our products and could pose a change to quality. This would effect the economic health of our company. Critically Essential.</p>
Hydrogen peroxide	<p>-Hydrogen peroxide is an effective and environmentally benign substance used to reduce/control microorganisms for food safety purposes. Hydrogen peroxide dissipates completely during its use and does not remain in the food. Hydrogen peroxide is used by some of our suppliers and so we would like to have it remain on the list so that our ingredients still meet our requirements from a food safety perspective.</p> <p>- Used as a sanitizer for packaging during aseptic box manufacturing. Hydrogen Peroxide is essential in sanitizing aseptic boxes prior to filling. No alternatives known. This is a food safety issue, the product is needed. Loss of this material would result in loss of sales for aseptic products. Critically essential.</p> <p>- Used for organic products sold throughout all 50 states. This is used in the sanitizer that is used in our facility. The hydrogen peroxide is an important ingredient in ensuring that our microbiological standards are kept to the upmost quality. Organic and natural alternatives that provide the same assurance of function and quality are not available. Maintaining a clean and food-safe environment is critical to our operation. Any negative result from using a lesser quality sanitizer would risk the product quality of all products. Any quality breach due to using an sanitizer with less effectively would create a devastating breach in our quality system. It would critically affect the economic health of our business. Critically essential.</p>
Magnesium chloride	<p>Companies selling to 50 states and many other countries. Certified from 13 to 15 years. Magnesium chloride is used in the manufacture of tofu to cause the soy protein to curd and to develop firm texture. Other calcium and magnesium based products do not give</p>



	<p>the same result. The magnesium chloride we use is naturally derived from sea water. Loss of this material would cause organic tofu production to go away. The texture would be horrible. We would go out of business. Critically essential to organic tofu processing.</p>
Nutrient Vitamins and minerals	<p>-Certified for 13 years. Sell throughout the U.S. As a dietary supplement company, we fortify products with Nutrient Vitamins and Minerals per the standard to help consumers maintain overall health. Due to the formulation, the amount of nutrients must be very small for the product to be manufactured to quality standards. Often Organic forms of vitamins do not have the same concentrated dosage as synthetic vitamins. To meet RDA amounts in our products, organic/natural forms are often not possible. Switching to Organic or Natural forms of Nutrients would affect quality in that the possible dosage able to be obtained would be less and not meet RDA values. Additionally, Organic and Natural Nutrients would decrease shelf-life of the product. Less nutritional value per serving coupled with a decreased shelf-life would greatly impact our business and customers would be lost. This would greatly impact the economic health of our operation. This substance is critically essential to our organic products.</p> <p>-Used in Cereals, bars, baby food, infant formula, grain products, breads, gluten free foods, dairy products. Certified for 15 years. Selling products in all 50 states and in many countries. There are no organic alternatives. If vitamins and minerals were removed, some products could not be sold, others would be nutritionally inferior and less desirable to consumers. Over 100 million dollars in lost sales. This substance is critically essential to our organic products.</p> <p><b>Ancillary Substances:</b> acacia gum, corn starch, medium chain triglycerides (from palm oil), modified food starch, sucrose, sunflower oil, sodium ascorbate crystalline, silicon dioxide, tocopherols, maltodextrin, polysorbate 80, propylene glycol, glycerol monooleate, triglycerol monooleate, citric acid, sodium benzoate.</p>
Ozone	<p>Ozone is an effective and environmentally benign substance used to reduce/control microorganisms for food safety purposes. The ozone dissipates completely during its use and does not remain in the food. Ozone is used by some of our suppliers and so we would like to have it remain on the list so that our ingredients still meet our requirements from a food safety perspective.</p>
Phosphoric acid	<p>Phosphoric acid is used in sanitation of food contact surfaces and food equipment. This cleaning is critical in our food safety program. No residual remains that could contaminate the food.</p>
Potassium acid tartrate	<p>Used in many types of baked goods. Sold in 50 states and other countries. Certified for over 10 years. Leavening agent. Other acids have undesirable effects in the products. Loss of this material would result in impaired quality and marketability of products and loss of sales. Critically essential.</p>
Potassium citrate	<p>Certified for 13 years. Products sold in 50 states. Acidulant, Buffering Agent, Potassium source. Our facility uses sodium citrate and citric acid, but neither provide the same functionality as potassium citrate for some products. Organic alternatives are not available. If available, we would test in our lab. If this ingredient were removed, those product that use it in the formulation would be changed. They would not have the same function or quality as the current product. Any time there is a change to quality, there is the potential to lose a customer. If a customer is looking for a particular functionality that only potassium citrate can deliver, then we would not be able to provide. This would negatively affect the economic health of our business. Critically essential.</p>
Potassium phosphates	<p>Used in "Made with organic" nondairy beverages sold in 50 states and other countries. Certified for over 10 years. Buffering agent (pH control) to prevent precipitation and impaired mouthfeel. Tried alternatives but they do not work well. Loss of this material would result in impaired quality and marketability of products and loss of sales. Critically</p>

	essential.
Sodium citrate	<p>Plant based dessert, plant based ice cream, plant based yogurt, organic fruit snacks, organic fruit gummies - 95%+ organic and made-with. Certified for over 20 years. Products sold in all 50 states. Used for cream plug in cream, emulsifier, and as a processing aid. We have not found any alternatives. Essential.</p> <p>-Cheese; cheese and dairy powders and seasonings. Certified for over 15 years. Products sold in Wisconsin, Pennsylvania, Missouri, &amp; South Dakota. Finished products are sold throughout the U.S. Used for the emulsification of cheese. Sodium Phosphates are an alternative, but they are being considered for removal as well. Currently use sodium phosphate, but it is being considered for removal as well. We would not be able to manufacture our products without this ingredient. Loss of this substance would result in the loss of all organic business. Entire business unit eliminated. Ingredient is essential.</p> <p>-Used in the preparation of fruit for use in our yogurts. Products are sold in all 50 states. We use sodium citrate primarily for its ability to buffer pH, but we know that it also does have an effect on the flavor of our products. Neither citric acid nor potassium citrate would have the same buffering effect in our products. We already use citric acid, in addition to sodium citrate, in our fruit so we know that we need these ingredients for entirely different purposes and one could not substitute for the other. It is harder to predict the outcome of trying to substitute potassium citrate for sodium citrate in our products, but we do know that it would pose a considerable reformulation challenge. Essential</p> <p>-Fruit Snacks 50 MM dollar business. Certified since 2002. Products in 50 states. Used for pH Buffer; critical for gel structure and flavor. For organic fruit snacks it helps the product solidify. Otherwise, it remains a liquid and we have not found another material that works for us. We are initiating an investigation on an alternative solution but do not know of one at this time. Ingredient is essential</p> <p>-Gummy Confections, Gummy Nutritional Supplements, Panned Jelly Beans. Products are distributed around the U.S. and have been certified for up to 20 years. Used as an acidulant, flavor and sodium source. One facility uses both citric acid and potassium citrate. However, only the function can be obtained with sodium citrate in specific products. Allowed organic alternatives are not available. Products using this ingredient will have a decrease in quality and function if this material is removed. Any production loss due to decrease in quality would impact the economic health of the operation. Companies would not be able to manufacture products without this ingredient. Ingredient is essential essential.</p>
Sodium hydroxide	Sodium hydroxide is used widely in food processing for cleaning food contact surfaces and equipment. Use of this substance is essential in our food safety program. It is always fully rinsed from equipment after used in a cleaning step. Sodium hydroxide is also likely used to adjust the acidity in several ingredients supplied to us.
Sodium phosphates	Used as an emulsifier in organic cheese products. Vital to the operation. No other alternatives are acceptable. We could not make the product without these emulsifiers. We would be unable to produce an organic cheese product. Critically essential.
Tocopherols	<p>-Certified organic massage and organic blends made with organic cosmetics, creams, lotions. Certified for 9 years. Sold in 50 states and 6 other countries. Used as a preservative and antioxidant. Rosemary antioxidant has shorter shelf life and strong odor. Tried this but it negatively impacted the odor of the product. Loss of this material would impact shelf life of product and odor. Essential.</p> <p>-Cookies and crackers. Certified since 2002. 50 states and Canada. Antioxidant. Yes, but other alternatives, for example org rosemary extract, it does not show its efficacy in extending shelf life. Organic product effects (effects to the quality and marketability of the organic product(s) you are marketing): - shorter shelf-life. Essential, Critical.</p>

	<p>-Certified since 2002 (13 years). Used in certified products sold throughout all 50 US States. Tocopherols are used in our supplement blend for Vitamin E. They are also used as an anti-oxidant in our moulding starch and other ingredients. If removed, it would significantly affect our company. Alternatives are not available. If this ingredient was removed, there would be a potential loss of shelf life for our products due. Additionally, products using tocopherols for Vitamin E would not have the same function. The loss of Vitamin E and decrease of shelf-life would negatively impact the economic health of our company. Critically essential.</p> <p>-Oils, mayonnaise, cereals, bars, baked goods. Certified for over 15 years. 50 states and many other countries. Antioxidant to protect fats from oxidation. Rosemary extract, but it does not work as well and it imparts a rosemary flavor that is not acceptable in most products. Loss of this material would cause massive problems with rancid oils and millions of dollars lost in sales.</p> <p>- Organic ready-to-use frostings. Certified for one year. Products sold in 50 states. Antioxidant. None. No availability of allowed alternatives (organic or natural) for this substance. Extremely difficult to find an antioxidant without an aftertaste, even at the smallest effective input rates. Researched extensively. If this were removed we would not be able to market as organic. Would cease to exist. Large recall of all products labeled organic. Eliminates value proposition of the products (organic). Critically essential.</p>
Xanthan gum	<p>-Used in organic frostings and cake mixes, cake and cookie mixes, beverages, soups, and frozen entrees and in juice and fruit spreads. Functions as a thickener and stabilizer. Sold throughout the US. Other gums and thickeners do not have comparable function. Alternatives don't work as well. The specification sheets do not list ancillary substances except for organic guar gum. The loss of this input from the National List would result in loss of sales due to decreased quality and marketability. We would cease to exist due to massive recall of products labeled organic. Eliminates our entire value proposition (organic). Would not be able to market as organic. Essential to all companies that responded.</p> <p>-Used in cake and cooking mixes, beverages, soups and frozen entrees as a thickener and stabilizer. Company has been certified for over 15 years. Sold in 50 states and other countries. Other gums and thickeners do not have comparable function. Researched alternatives but they do not have a comparable function. Loss of this product would lead to decreased quality and marketability of our products.</p> <p>-Thickening agent in juice and fruit spreads. Certified for 13 years. Products are sold throughout US and Canada. Xanthan has a specific form needed. There are no other alternatives that work. Loss of this product would lead to loss of sales.</p> <p>-Stabilizer and thickener in creams and lotions. Certified for 9 years. Our products are sold in 50 states and 7 countries. There are no alternatives with the same quality and function. Cellulose can work but it's not as effective.</p> <p>-Ancillary Substances: None known, none listed on the specification sheet. For mixed blends organic guar gum is used.</p>

In closing, we thank the Board for its time and commitment. OTA is committed to collecting information from our broad membership and beyond in order to assist NOSB in determining whether or not a substance on the National List remains essential to organic handling.

Again, on behalf of our members across the supply chain and the country, OTA thanks NOSB for the opportunity to comment and for your commitment to furthering organic agriculture.

Respectfully submitted,



Gwendolyn Wyard  
Senior Director of Regulatory and Technical Affairs  
Organic Trade Association

cc: Laura Batcha  
Executive Director / CEO  
Organic Trade Association

**Appendix A – Survey Questions (Example: Xanthan Gum)**

1. Please describe the types of certified products or processes this substance is used in:

2. How many years has your company been certified organic?

3. Where is your organic production located (state, region, country, etc):

4. How many states are your products sold in? Are they exported to other countries?

5. What is the function of the substance in your products or processes (e.g. stabilizer, thickener, flavor, sanitizer, etc.)?

6. Describe the availability of allowed alternatives (organic or natural) for this substance in terms of quality, quantity and form:

7. If available, have you conducted research (e.g. R & D trials) on the use of allowed natural or organic alternatives?

8. Are there any alternative management practices that would eliminate the need for the specific substance?

9. NOSB is requesting information about the ancillary substances (e.g. carriers, preservatives, stabilizers) that may be used in xanthan gum. Based on the ingredient statement provided in specification sheet that accompanies the

xanthan gum you purchase, please list any ingredients that are added and remain in the product you buy. Note: The "ancillary substances" should be listed in the ingredient statement found on the specification sheet.

10. Describe the effects to your operation should you no longer be allowed to use xanthan gum:

Describe the effects to your operation should you no longer be allowed to use xanthan gum:

Organic product effects (effects to the quality and marketability of the organic product(s) you are marketing):

Environmental effects (effects to environment if the substance was no longer allowed AND effects to environment from potential alternatives):

Economic effects (effects to economic health of your operation):

11. Based on your answers to the questions above, rate the essentiality of this substance (i.e. how necessary is this substance to the continued success of your organic products and operation?):

**1 Less Essential**    2    3    4    **5 More Essential**    6    7    8    9    **10 Critical**

12. Does your company intend on submitting comments directly to NOSB regarding the sunset review of this substance?

If you would like assistance or guidance in submitting comments to NOSB, please provide your email address, and OTA staff will contact you directly: