

FINAL MINUTES OF THE
NATIONAL ORGANIC STANDARDS BOARD
FULL BOARD MEETING
AUSTIN, TEXAS
OCTOBER 31 - NOVEMBER 4, 1995

1 **October 31, 1995**

2 The initial session of the National Organic Standards Board (NOSB) meeting was called to order
3 at 8:09 a.m. by Chairperson Bob Anderson.

4 Members in attendance were: Tom Stoneback, Craig Weakley, Dean Eppley, Don Kinsman,
5 Merrill Clark, Michael Sligh, Bob Anderson, Gene Kahn, K. Chandler, Rod Crossley, Fred
6 Kirschenmann, Kathleen Merrigan, and Margaret Wittenberg. Participating at this meeting as the
7 certifying agency advisor to the NOSB was Tom Tomas of Farm Verified Organic, Inc.

8 National Organic Program staff members present from USDA were: Michael Hankin, D. Ted
9 Rogers, Michael Johnson, Toni Strother, and Grace Gershuny. Also in attendance from the
10 USDA was Eileen Stommes, Director of the Transportation and Marketing Division, Agricultural
11 Marketing Service (AMS).

12 The Technical Advisory Panel Coordinator present at the start of the meeting was Zea
13 Sonnabend. John Brown was expected to arrive later, along with advisors Rich Theuer, Lynn
14 Coody, Brian Baker, and Bill Wolf.

15 Eileen Stommes opened the initial session by commenting on the aggressive agenda set forth by
16 the NOSB. She thanked the Board for its work and noted that the recommendation process is
17 winding down simultaneously with a decline in Federal Advisory Committee funding. She also
18 pointed out that there is still much work to do, and the USDA is committed to a timely proposed
19 rule in 1996. She closed by again thanking the NOSB for its commitment and dedication to
20 bringing together everyone in the organic industry.

21 On behalf of the NOSB and the USDA, Bob Anderson recognized the retiring Board members
22 and presented them with mementos. Those Board members included: Merrill Clark, Don
23 Kinsman, Tom Stoneback, and Craig Weakley. Michael Sligh was recognized for his service
24 (1992-1995) as the first Chairperson of the NOSB.
25

26 Eileen Stommes followed with a presentation to Bob Anderson for his dedication and leadership
27 as the previous year's chairperson.

28 Brent Wiseman, Organic Programs Director for the Texas Department of Agriculture (TDA),
29 thanked the USDA and NOSB for selecting Austin, Texas, as the host site for this meeting. The
30 Texas Department of Agriculture Deputy Commissioner, Larry Soward, followed with some

31 remarks. Mr. Soward discussed the history and current status of the TDA Certification Program
32 and noted the lack of organic livestock standards both in Texas and nationally.

33 USDA Staff Report - Operations Manager Michael Hankin proceeded with an update on the
34 National Program activities and program direction, explaining that Program Leader Harold
35 Ricker was in Costa Rica at the Bio Fair and wished very much that he could be present at this
36 meeting. Hankin first reviewed the funding status for FY '95 and briefly discussed the projected
37 program funding for FY '96. It is expected that the NOP will retain the same level of funding as
38 FY '95 (\$500,000), along with a cost of living adjustment (\$100,000).

39 He also reported that there will be a five thousand-dollar reduction in funding for the Board, from
40 forty-five thousand to forty thousand dollars. It is expected that next June would be the first
41 possible meeting date in calendar year 1996. As a note, the nominations for new Board members
42 are officially closed. The Department received seventeen nominations for the five positions.

43 Hankin followed with information about a number of staffing changes in both the Department
44 and in the Transportation and Marketing Division (TMD). Former Acting Assistant Secretary for
45 Marketing and Regulatory Programs, Patricia Jensen, was replaced by Michael Dunn; TMD has a
46 new director Eileen Stommes, and deputy director, Paul Kepler. TMD also has completed an
47 internal reorganization, and the NOP has acquired an additional staff member, Toni Strother.
48 Toni will be assisting the staff in many areas, including database management.

49 Next, Hankin reported on the status of the proposed rule. The second draft of the Accreditation
50 portion of the program was recently delivered to the Office of General Counsel (OGC). He then
51 went on to announce that the accreditation program will be published along with the other
52 sections of the program. In closing, Hankin urged the Board to make recommendations on the
53 materials that are up for review, and to avoid tabling materials. He went on to encourage the
54 Board to utilize the materials experts at the meeting (i.e., Zea Sonnabend, Lynn Coody, Brian
55 Baker, Tom Tomas, John Brown, and Rich Theuer) to supplement data gaps in the review
56 notebooks.

57 **LIVESTOCK COMMITTEE REPORT:**

58 Fred Kirschenmann began the livestock committee's session by calling attention to Paul
59 Thompson's deliberations on the "Spirit of the Soil" and reminded everyone of the overall
60 objectives of the Board's mission. He also noted that the following committee documents were
61 up for Board approval: 1) The Use of Antibiotics in Organic Livestock Production; 2) The Use of
62 Parasiticides in Organic Livestock Production; 3) TAP Review of Antibiotics and Parasiticides in
63 Organic Livestock Production; 4) TAP Review of Vitamins and Minerals in Organic Livestock
64 Production; 5) TAP Review of Inoculants and Vaccines in Organic Livestock Production;
65 6) The Use of Inoculants and Vaccines in Organic Livestock Production; and 7) Revisions to
66 the NOSB Livestock Addendums for Organic Livestock Production.

68 *The Use of Antibiotics in Organic Livestock Production & The Use of Parasiticides in Organic*
69 *Livestock Production.*

70 (One combined vote was taken for both documents.) Merrill Clark noted that many persons had
71 expressed the opinion to the committee that parasiticides and antibiotics were not needed. Fred
72 followed by stating that the purpose of this recommendation is to present a laying hen
73 recommendation that is consistent with the NOSB's dairy recommendation. Gene Kahn moved
74 and it was seconded by Rod Crossley to accept the document as a Board Final Recommendation
(BFR). Vote: Yes - 10, Opposed - 3. Motion carried.

75 *TAP Review of Antibiotics and Parsiticides in Livestock Production.*

76 Prior to a motion to accept this document as a BFR, Merrill presented the idea that antibiotics
77 and parasiticides should be individually reviewed within the Technical Advisory Panel process.
78 Bob Anderson followed with two recommended changes to the document prior to the motion for
79 approval - a) delete at line 39 "most likely to be" and b) add a two-year review clause to the
80 document. There were no objections to the changes and Rod Crossley moved to accept the
81 document as amended as a BFR. It was seconded by Gene Kahn.
82 Vote: Yes - 11, Opposed - 1, Absent - 1. Motion carried.

83 *TAP Review of Synthetic Vitamins and Minerals in Livestock Production.*

84 Merrill pointed out that the statement of principle that was used as a preface in the two previous
85 documents was missing. Gene spoke to her concern, noting that lines 30-36 did in fact provide
86 the principle for the committee's thinking. Prior to the motion for approval, Bob once again
87 offered the addition of a "two year review clause" and also recommended amending lines 28-29
88 to read "*Producers often may not be able to control the quantity of vitamins and minerals*
89 *naturally occurring in feedstuffs.*" There were no objections. Mike Hankin noted that a list of
90 those supplements (which are to be used in the program) are published in the Federal Register
91 and are all Generally Recognized as Safe (GRAS) by the FDA. Gene moved and it was seconded
92 by Tom Stoneback to accept the document as amended as a BFR.
93 Vote: Yes - 11, Opposed - 1, Absent - 1. Motion carried.

94 *TAP Review of Inoculants and Vaccines in Livestock Production.*

95 Bob Anderson recommended the following changes: a) delete "unrestricted" in line 12;
96 b) substitute "*deferring initial TAP review of inoculants and vaccines*" for "forgoing TAP
97 review of inoculants and vaccines"; and c) add a two-year review clause. There was unanimous
98 agreement on the changes. Gene moved and Dean Eppley seconded a motion to accept the
99 document as amended as a BFR. Vote: Yes - 12, Opposed - 0, Absent 1.

100 *The Use of Inoculants and Vaccines.*

101 The following changes were accepted as amendments to the document prior to the motion for

102 approval: a) Line 10 - delete the word "unrestricted" and b) Line 16 - Change the word "is" to
103 "may be." Rod then followed with a motion to accept the document as amended. K. Chandler
104 seconded the motion. Vote: Motion carried unanimously to accept the document as a BFR.

105 *Organic Livestock Production. (This recommendation is a compilation of changes to be made*
106 *in the Organic Livestock Production Standards section of the NOSB Final Recommendations*
107 *adopted June 1-4, 1994 in Santa Fe, New Mexico.)* The changes reflect new language for the
108 a) veterinarian-client relationship and b) the removal of "growth promoters" from the document.
109 Craig Weakley moved and it was seconded by Gene to accept the recommendation as
110 amendments to the BFR approved in June 1994. Vote: Motion carried unanimously.

111 BREAK.

112 **PROCESSING, HANDLING, AND LABELING COMMITTEE:**

113 Following the break, the Board resumed business at 10:20 a.m. to discuss the PHL committee's
114 new recommendations to the full Board. The following documents up for approval included:
115 1) Additions to "General Organic Food Labeling Standards"; 2) Allowable Methods of Oil
116 Extraction; 3) Modification of "Requirements for Handler Certification"; 4) Addition of
117 Synthetic Magnesium Chloride to National List; 5) Use of Nutrient Supplementation in Organic
118 Foods; 6) Use of Natural Flavors in Organic Foods; and 7) Incidental Food Additives in Organic
119 Foods.

120 *General Organic Food Labeling Standards.*

121 It was noted that approximately 90% of the General Organic Food Labeling Standards have
122 already been passed as NOSB Final Recommendations. The additions represent reiterations and
123 clarification; all information listed in the document has been reviewed for consistency with the
124 OFPA. Gene moved and it was seconded by Bob to accept the document as and addition to the
125 existing Board final recommendations. Vote: Yes - 10, Opposed - 1, Absent - 2. Motion carried.

126 *Allowable Methods of Oil Extraction.*

127 Michael Sligh moved and it was seconded by Dean to accept the document as a Board final
128 recommendation. Discussion followed, and Mike Hankin commented on the language in lines
129 34-37 regarding hexane. He went on to ask if it was the intent of the committee to prohibit
130 hexane use in the non-organic ingredient components of organic foods and foods "made with
131 organic ingredients," as the language seemed to imply. Craig followed by saying that this is the
132 committee's intent. Vote: Motion carried unanimously.

133 *Requirements for Handler Certification.*

134 There were a number of proposed changes to the handler certification document. They represent

136 both additions and deletions to an NOSB final recommendation, adopted on June 4, 1994, in
137 Santa Fe, New Mexico. The proposed changes are as follows: a) Line 27- delete the word
138 “should”; b) Line 27 - add after the word ‘integrity’ -- “and the audit trail”; c) Line 29 - delete
139 the word “distributors”; d) Line 30 - add after the word ‘retailers’ -- “and distributors who
140 process’ [OFPA Section 2103 - see below] and substantially transform repack or relabel”;
141 e) Line 56 - add footnote number 1 - “OFPA Section 2103 Definitions (17) Processing. The term
142 “processing” means cooking, baking, heating, drying, mixing, grinding, churning, separating,
143 extracting, cutting, fermenting, eviscerating, preserving, dehydrating, freezing, or otherwise
144 manufacturing, and includes the packaging, canning, jarring, or otherwise enclosing food in a
145 container.”; and f) Line 80 - add after ‘under the’ -- “OFPA only if they both take title to the
146 organic products and substantially transform, or process, or repack or relabel these
products.”

147 During the document discussion, Michael Sligh commented that there should be some language
148 in the definitions to deal with the effect of this recommendation on co-ops. Craig and Margaret
149 responded by noting that the committee will address the issue of co-ops and retailing for the next
150 meeting. Rod moved and Gene seconded a motion to accept the additions and deletions as noted
151 in the document. Vote: Motion carried unanimously.

152 Addition of Synthetic Magnesium Chloride to National List.

153 Rod began the discussion by commenting on the industry’s mislabeling of magnesium chloride
154 as “nigari”. Margaret Wittenberg went on to reiterate that most of the industry is using synthetic
155 magnesium chloride. Just prior to a motion for Board approval, Ted Rogers noted that the FDA
156 does not recognize “nigari” as an ingredient; therefore, the use of the word is prohibited. Kahn
157 noted that lines 44-48 should not have been included. Rod moved and Gene seconded the
158 motion to accept the document and he also recommended the addition of the word “be” after the
159 word ‘should’. Vote: Yes - 12, Opposed - 0, Abstain - 1. Motion carried.

160 Use of Nutrient Supplementation in Organic Foods.

161 Michael Sligh began the discussion by asking for clarification on what “independent professional
162 organizations” are. Rod noted they have no commercial interest in the matter of which vitamins
163 or minerals are used in foods. Merrill then expressed her concern over the addition of accessory
164 nutrients, as well as the categorical acceptance of a large group of vitamins and minerals. Craig
165 clarified that the PHLC was not recommending that vitamins and minerals for human
166 consumption be exempted from the National List process. Gene moved and it was seconded by
167 Tom to accept the document as a BFR with two small changes which included a) Line 16 - delete
168 the word ‘must’ and replace it with “may”; and b) Line 32 - add “and fortification” after the
169 word ‘enrichment’. Vote: Yes - 12, Opposed - 1. Motion carried.

170 *Use of Natural Flavors in Organic Foods (Proposal #2).*

171 It was noted that the original draft of this document went out for public comment and has been
172 responded to. It was also stated that the intent of this document is to prohibit propylene glycol
173 and artificial preservatives. This document differs from the previously submitted Committee
174 recommendation in that this recommendation clearly delineates separate guidelines for “organic
175 foods” and “foods made with organic ingredients”. Gene went on to describe his research on
176 flavor houses, and his findings show that there are no flavor houses currently producing organic
177 natural flavors, but one is starting to carry some with no synthetic carriers, solvents, or
178 preservatives. He cited competitive market forces in the industry as future incentive for the
179 production of organic natural flavors. Rod moved and it was seconded by Gene to accept the
180 revised recommendation as a BFR. Vote: Motion carried unanimously.

181 *Incidental Food Additives in Organic Foods.*

182 Tom Stoneback inquired as to whether or not there were trade secret issues at hand when
183 discussing processing aids. Rod responded by stating that the substances in question can be
184 disclosed to a certifier and that label declaration is not the answer. Merrill followed with
185 comments acknowledging the applicability of this recommendation to “foods made with organic
186 ingredients,” but contested applying it to “organic foods” as well. Craig went on to review the
187 committee’s longstanding debates over this issue and the need to bring it to resolution. Tom
188 moved and it was seconded by K. Chandler to accept the recommendation as a BFR.
189 Vote: Yes - 9, Opposed - 3, Abstain - 1. Motion carried.

190 LUNCH BREAK.

191 The Public Input session followed the lunch break. The meeting was adjourned for the day at
192 5:30 p.m. after the public input session.

November 1, 1995

194 **CROPS COMMITTEE REPORT:**

195 The meeting was called to order at 8:00 a.m. by chairperson Bob Anderson.

196 Members in attendance were: Tom Stoneback, Gene Kahn, Jay Friedman, Rod Crossley, Craig
197 Weakley, Dean Eppley, Don Kinsman, Merrill Clark, Michael Sligh, Bob Anderson, Margaret
198 Wittenberg, K. Chandler, Fred Kirschenmann, and Kathleen Merrigan. Participating as the
199 certifying agent advisor to the NOSB was Tom Tomas of Farm Verified Organic.

200 Staff members present from USDA were: Michael Hankin, D. Ted Rogers, Toni Strother, Grace
201 Gershuny, and Michael Johnson.

202 Technical Advisory Panel Coordinators present were: Zea Sonnabend, John Brown, and Rich
203 Theuer as facilitator.

204 The following Crops Committee documents were up for discussion and approval at this session:
205 1) Phase-Out of Chilean Nitrate; 2) Banana Planting Stock; 3) Emergency Spray Exception;
206 4) Ban on Petitioned Materials; 5) Definitions and Interpretations; and 6) NOSB Materials
207 Review Criteria.

208 *Phase-Out of Chilean Nitrate.*

209 Grace Gershuny briefly discussed the use of chilean nitrate in an organically managed system,
210 noting that its use would still be within the context of the NOP standards. She also made
211 reference to chilean nitrate and international standards -- it is not the intent of the NOP to make
212 our standards identical to other country's standards. In fact, the USDA will work towards
213 harmonization and agreements where organic principles are the foundation and we will need to
214 acknowledge minor differences. Michael Sligh added that a phase-out will increase the use of
215 chilean nitrate and not decrease it. K. Chandler followed with his support for the allowance of
216 chilean nitrate, mindful of its minor use importance to some organic farmers. Jay expressed his
217 non-support, citing the possible increase in use as Sligh mentioned earlier in his comments.
218 Gene then cited that the USDA's Organic Farm Plan scrutiny will deal with its overuse and
219 abuse. K. Chandler moved and it was seconded by Bob Anderson, who after agreement from the
220 Board, added a two-year review clause. The annotation would limit use to 20% of the total
221 nitrogen supplied to a crop. Vote: Yes - 8, Opposed - 6. Motion fails.

222 In a separate discussion, the Board again discussed Chilean Nitrate use and subsequently passed
223 the following proposal regarding chilean nitrate; Vote: Yes - 13, Opposed - 1.

224 *Chilean Nitrate Special Use Guidelines*

225 The use of Chilean Nitrate (16-0-0) in organic crop production is limited to not more than 20
226 percent of total nitrogen supplied to a crop. The producer's Farm Plan shall contain specific
227 provisions and strategies designed to substantially reduce the use of Chilean Nitrate over time.
228 The amount and timing of these reductions will be consistent with documented site specific
229 constraints. The Farm Plan will seek to explore each and every alternative to the routine use of
230 Chilean Nitrate in the farming system. These alternatives include, but are not limited to,
231 composting, improvement of compost, leguminous cover crops, interplanting, rotations,
232 microbial enhancements, animal manures, varietal selections, planting date alterations, and
233 reducing amounts of applied supplemental nitrogen. The timing and efficiency of Chilean
234 Nitrate application shall be optimized and documented in the Farm Plan. Certifiers will monitor
235 progress in the reduction of Chilean Nitrate use and will decertify farmers that develop long term
236 dependence on this material. Strong farmer commitment, aggressive action, and measurable
237 results are all necessary elements of this special use of Chilean Nitrate.

238 This policy shall be reviewed within two years.

239 *Banana Planting Stock.*

240 Michael Sligh commented on the implication of large scale tissue culture use, and its relationship
241 to a lack of genetic diversity (pressures of identical crops on the ecosystem). Bob moved and it
242 was seconded by Rod to accept the banana document as a BFR after making a minor correction
243 to line 12: change 'seed' to "sucker".
244 Vote: Yes - 13, Opposed - 1. Motion carried.

245 *Emergency Spray Exception.*

246 Michael Sligh moved and it was seconded by Dean to accept this document as written. No
247 discussion ensued. Vote: Motion carried unanimously.

248 *Ban on Petitioned Materials.*

249 Rod Crossley moved and it was seconded by Craig Weakley to accept this document. It was
250 noted that the document had not previously been distributed to the NOSB or USDA staff. The
251 substances listed on the document were: glyphosate, thiram, benomyl, captan, and methoxychlor.
252 During the discussion, Ted Rogers explained that these petitioned materials were standards
253 issues, rather than a national list issue, in that their use is prohibited on the farm, but that seed
254 purchased may have been treated with one of these substances. Jay Friedman also expressed
255 concern over the legality of the recommendation, but supports its underlying principle. Kahn
256 explained that by approving this document, the NOSB is deciding without a TAP review, but its
257 knowledge of a material, that it does not meet the seventh criteria in Section 2119(m) of the
258 OFPA (compatibility) and therefore does not need to undergo a TAP review to evaluate its

environmental impact. Vote: Yes - 13, Opposed - 0, Absent - 1. Motion carried unanimously.

260 *Definitions and Interpretations.*

261 *(This document includes a new section which defines a synthetic analogue, and refines several*
262 *definitions that were on the previous version of this document.)* Fred K. moved and it was
263 seconded by Rod to accept this document as a BFR. Prior to a vote, there were several
264 amendments added to the document. Michael Sligh proposed two technical amendments, both
265 regarding rRNA and rDNA: a) Line 71-72 should read as follows: "**Recombinant RNA & DNA**
266 **Techniques.** *Techniques that artificially break apart and recombine DNA and RNA molecules*
267 *with the intent or altering genetic instructions,"* and b) Line 37 - add after 'recombinant DNA' --
268 "*and RNA techniques*". Kathleen then recommended the addition of "*and must contain only*
269 *dead organisms.*" after the word 'organism' in line 48. Vote: Motion carried unanimously.
270 Needing clarification of lines 90-95, Jay received the response from Grace that this new
271 definition will serve as an additional reference and decision making tool. The discussion
272 concluded as Craig moved and it was seconded by Rod to add at the end of the sentence on line
273 92: "*provided that the synthetic material is on the National List.*" Vote: Motion carried
274 unanimously.

275 *NOSB Materials Review Criteria.*

276 Grace led the discussion for this document, and noted that it was established to expand the intent
277 of the OFPA criteria listed in section 2119(m)(7), "compatibility with a system of sustainable
278 agriculture". She noted that this document would be helpful to the staff in providing guidance
279 for classifying petitioned materials that were questionable as to whether they fit within the
280 context of the national program. Grace went on to explain that the document was late in its
281 evolution, but should nonetheless assist the Board in its materials review and evaluation. Fred
282 moved and it was seconded by Kathleen to accept the document, deleting the following in lines
283 48-49: "*Example: pBO. Also, rDNA produced biofungicides might get serious consideration*
284 *here if they are a good alternative for copper and don't violate criterion #1 above.*" Vote: Yes -
285 10, Opposed - 3, Absent 1. Motion carried. Following acceptance of the document, Jay moved
286 and it was seconded by Merrill to add the following amendment at line 10: "*However, no*
287 *material may be consistent with organic agriculture and appear on the National List in the*
288 *absence of a strong factual showing in scientific criteria.*"
289 Vote: Yes - 11, Opposed - 0, Abstain - 2, Absent - 1. Motion carried.

290 Following the document discussions, Tom Stoneback briefed the Board on sewage sludge and
291 bio-solids. Fred urged that the material be moved forward to the TAP and that information
292 collection should continue. The Board was in agreement with Fred's suggestion.

293 **Discussion Paper: Organic Principles, Standards Development, and Farm Plan**

294 **Requirements.** This paper was prepared by the National Organic Program staff at the request of
295 the Crops Committee, to help clarify how they are looking at the criterion of progressive

296 improvement as it relates to anticipated NOP Standards and Organic Farm Plan provisions.
297 During the discussion, Craig noted that the use of the word "Tolerated" seems to have a negative
298 connotation and use of the word "Restricted" appears to be a better choice and add more clarity
299 to its meaning. Michael Sligh recommended that the NOP take a look at the Texas ten-point
300 evaluation system. Fred agreed to bring forth a proposal to develop a taskforce to add to the
301 discussion paper's high points.

302 **ACCREDITATION COMMITTEE DISCUSSION:**

303 **Use of Private Seals.**

304 Fred Kirschenmann led the discussion on the use of private seals. He explained why the private
305 certifiers want this particular option; Michael Sligh expressed his support for the document. Jay
306 dissented, and spoke to the additional confusion that this will cause in a national program. He
307 also noted that there were a number of unresolved questions in the document and pointed out that
308 there had been no public input on the document. Gene rejected the idea of "seal use" to promote
309 producer achievements and production abilities, and the massive consumer confusion that this
310 would cause. There was additional comment on the paper, and then it was brought to a vote - 5
311 aye / 6 opposed / 3 abstentions. The motion failed.

312 In a separate discussion, the issue of private seal usage was revisited on Thursday, November 2.
313 Kathleen began by reading a new proposal, and Fred continued to assert the need for certifier seal
314 usage, because much time and energy have been spent on their development and market
315 recognition. He cited the ability of seals to be indicative of other claims related to practices and
316 standards, e.g., safe for the chemically sensitive. Bob concurred on the right to continue seal
317 usage, but noted that they should not serve as barriers to trade nor should they create further
318 market confusion. Rod agreed as well, but rejected the notion of making superior claims with
319 seals. Fred insisted the issue was differentiation, and that certifiers should secede if this
320 provision was denied. Gene also agreed with allowing private seal usage, but objected to
321 superior claim implications associated with their use. Kathleen defended the "chemically
322 sensitive" example as being above and beyond the organic claim; Tom Stoneback questioned its
323 place or applicability to a national organic program. As the discussion came to a close, Rod
324 moved and it was seconded by Craig to accept the new seals proposal as amended. Vote: Yes -
325 12, Opposed - 1. Motion carried unanimously. Listed below is the proposal as amended and
326 approved.

327 **SEALS**

328 (A) A certifying agent may permit the use of its seal, logo, or trademark on product labels to:

329 (a) denote affiliation with or membership in the applicable private certification program
330 or organization;

331 (b) indicate the state or region of origin of the product; and/or (c) designate claims on the

part of the producer, processor, or product not covered under Sections XXX (organic production standards and National List).

(B) A seal, logo, or trademark shall not be used:

(1) to restrict trade or prevent procedures or processors from being certified in accordance with the Act;

(2) to imply that products so labeled are superior to other products produced in accordance with Sections XXX (organic production standards and National List);

(3) to imply USDA accreditation of certifying activities for claims not covered under Sections XXX (organic production standards and National List); and shall not be

(4) required to be displayed on any product offered for sale as “organic” or “organically produced” as a condition of certification.

Next, a document, developed by the Organic Certifiers Caucus organization, was circulated which suggested a new approach for selecting future NOSB meeting certifier representatives. The document will be considered by the Accreditation Committee before recommending future temporary certifier positions to the Executive Committee.

Code of Ethics.

Fred then moved on to the Code of Ethics document, but noted that he did not expect a vote at this time on it. He subsequently led a paragraph by paragraph discussion and met significant opposition to the concept of such a document. Jay moved and it was seconded by Merrill to table the document and to review it again later in the week. The NOSB consented in the majority.

INTERNATIONAL COMMITTEE:

Fumigation Tables

In response to inquiries regarding the fumigation and subsequent status of organically grown fresh fruit and vegetables that are imported into the United States, the NOP, in consultation with the Plant Protection and Quarantine (PPQ) division of the Animal and Plant Health Inspection Service (APHIS), developed a set of “fumigation” tables. Michael Johnson briefly discussed the tables and answered several questions posed by the NOSB and other meeting attendees. There is a copy of the cover letter and tables included in the minutes.¹

¹See Attachment 2, entitled *Fumigation Tables*.

360 **Materials Discussion**

361 As an introduction to the materials review session, Kathleen commented on the recent request to
362 change an NOSB member's vote registered during the NOSB meeting in Orlando in April 1995.
363 Craig suggested that at the close of each vote, a final tally should be announced so as to ensure
364 accuracy. All Board members were in agreement with this suggestion and further determined
365 that the burden was on the NOSB member to ensure the accuracy of votes; vote tallies would be
366 official as recorded at the end of the voting day. Bob went on to review the Materials Oversight
367 Working Group conclusions and the NOSB voting procedures and noted that the synthetic/non-
368 synthetic decision will be a simple majority and abstentions are counted as a "no" vote, absences
369 don't count toward the majority, and 2/3 of the NOSB must be present to conduct a vote.

370 The second round of the NOSB materials review began with the review of processing materials.
371 The round was coordinated by former NOSB Processing committee chairperson, Rich Theuer,
372 Ph.D. Dr. Theuer was also a leading reviewer for a number of the processing materials.

373 The following notes represent the NOSB materials voting process that occurred during the
374 remainder of the week. The notes detail the actual votes on each material and some general
375 comments and discussion notes. They are listed in the order in which they appear in the
376 document "Summary of NOSB Recommendations for Materials Considered at Austin, Texas,
377 November 1995" that was distributed to the persons on the public mailing list in January 1996.

378 **Processing Materials**

379 **Calcium Carbonate** - Reviewed by Rich Theuer, Bob Durst, and Joe Montecalvo.
380 Determined to be non-synthetic; Vote - Unanimous.
381 The NOSB's decision is to allow this material for use in organic food processing;
382 Vote - Unanimous.

383 **Cornstarch (Native)** - Reviewed by Joe Montecalvo and Rich Theuer.
384 Determined to be non-synthetic; Vote - Unanimous.
385 The NOSB's decision is to allow this material for use in organic food processing;
386 Vote - Unanimous. Discussion: Bob Anderson noted and it was agreed upon by the Board that
387 they were only voting on native and unmodified starches.

388 **Cultures, Dairy** - Reviewed by Rich Theuer.
389 Determined to be non-synthetic; Vote - Unanimous.
390 The NOSB's decision is to allow this material for use in organic food processing;
391 Vote - Unanimous. Annotation: Bacteria may not be a product of rDNA technology.

392 **Gums (Water Extracted Only - Arabic, guar, locust bean, and carob bean)** - Reviewed by
393 Joe Montecalvo and Rich Theuer. Determined to be non-synthetic; Vote - Unanimous.
394 The NOSB's decision is to allow this material for use in organic food processing;

- 398 Vote - Unanimous. Annotation: Water extracted only.
- 396 Discussion: Bob Anderson made a motion and it was seconded by Rod Crossley to include the
397 above listed annotation for gums. Vote: 12 aye / 2 opposed. Motion carried.
- 398 **Yeast, Autolysate** - Reviewed by Joe Montecalvo and Rich Theuer.
399 Determined to be non-synthetic; Vote: 13 aye / 0 opposed / 1 abstention.
400 The NOSB's decision is to allow this material for use in organic food processing;
401 Vote: 13 aye / 1 opposed. Annotation: Yeast (used for source) that is a product of rDNA
402 technology is prohibited. Discussion: Merrill expressed her belief that this material is a form of
403 MSG in disguise. Rich followed by indicating that this material is a natural hydrolysate, and not
404 a concentrated synthetic, as are MSG's.
- 405 **Yeast, Bakers** - Reviewed by Joe Montecalvo and Rich Theuer.
406 Determined to be non-synthetic; Vote: 13 aye / 0 opposed / 1 abstention.
407 The NOSB's decision is to allow this material for use in organic food processing;
408 Vote: 12 aye / 1 opposed / 1 abstention.
409 Annotation: Yeast (used for source) that is a product of rDNA technology is prohibited.
- 410 **Yeast, Brewers** - Reviewed by Joe Montecalvo and Rich Theuer.
411 Determined to be non-synthetic; Vote: 12 aye / 0 opposed / 2 abstentions.
412 The NOSB's decision is to allow this material for use in organic food processing;
413 Vote - Unanimous. Annotation: Yeast (used for source) that is a product of rDNA technology is
414 prohibited.
- 415 **Yeast, Nutritional** - Reviewed by Joe Montecalvo and Rich Theuer.
416 Determined to be non-synthetic; Vote - Unanimous.
417 The NOSB's decision is to allow this material for use in organic food processing;
418 Vote: 13 aye / 1 opposed. Annotation: Yeast (used for source) that is a product of rDNA
419 technology is prohibited. Growth on petrochemical substrates and sulfite waste liquor is also
420 prohibited.
- 421 **Yeast, Smoked** - Reviewed by Rich Theuer and Joe Montecalvo.
422 Determined to be non-synthetic; Vote: 13 aye / 0 opposed / 1 abstention.
423 The NOSB's decision is to allow this material for use in organic food processing;
424 Vote: 11 aye / 3 opposed. Annotation: Yeast (used for source) that is a product of rDNA
425 technology is prohibited. Growth on petrochemical substrates and sulfite waste liquor is also
426 prohibited. The handler must document in the Organic Handling Plan that the smoke flavoring
427 used is produced using a non-synthetic process that does not use synthetic processing aids or
428 additives.
- 429 **Calcium Citrate** - Reviewed by Mark Schwartz and Joe Montecalvo.
430 Determined to be synthetic; Vote: 13 aye / 0 opposed, 1 absent.
431 The NOSB's decision is to allow this material for use in organic food processing;

432 Vote: 11 aye / 1 opposed / 1 absent / 1 abstention.

433 **Calcium Phosphates (Di, Tri, Mono)** - Reviewed by Mary Mulry, Rich Theuer, and Joe
434 Montecalvo. Determined to be synthetic; Vote - Unanimous.

435 The NOSB's decision is to allow this material for use in organic food processing;

436 Vote: 13 aye / 1 opposed. Discussion: This material is used in baking powder, fortification, for
437 yeast growth, and a firming agent for yogurt. Craig noted that the Handling Plan will discover
438 other uses for the material that are not currently known.

439 **Carbon Dioxide (Non-synthetic)** - Reviewed by Joe Montecalvo, Rich Theuer, Mary Mulry,
440 and Bob Durst. Determined to be non-synthetic; Vote - Unanimous.

441 The NOSB's decision is to allow this material for use in organic food processing;

442 Vote - Unanimous.

443 **Carbon Dioxide (Synthetic)** - Reviewed by Joe Montecalvo, Rich Theuer, Mary Mulry, and
444 Bob Durst. Determined to be synthetic; Vote - Unanimous.

445 The NOSB's decision is to allow this material for use in organic food processing;

446 Vote: 13 aye / 1 opposed. (*The non-synthetic form is preferable to the synthetic.*)

447 **Chlorine Bleach (Calcium hypochlorite, sodium hypochlorite, chlorine dioxide)** -

448 Reviewed by Joe Montecalvo, Marta Engel, Rich Theuer, Walter Jeffery, and Chris Milne.

449 Determined to be synthetic; Vote - Unanimous.

450 Annotation: Allowed for disinfecting and sanitizing food contact surfaces. Residual chlorine

451 levels for washwater in direct crop or food contact and in flush water from cleaning irrigation

452 systems that is applied to crops or fields cannot exceed the maximum residual disinfectant limit

453 under the Safe Drinking Water Act (currently 4mg/L expressed as Cl₂). This substance is to be

454 reviewed again in two years.

455 **Ethylene** - Reviewed by Joe Montecalvo, Rich Theuer, and Chris Milne.

456 Determined to be synthetic; Vote - Unanimous.

457 The NOSB's decision is to allow this material for use in organic food processing;

458 Vote: 13 aye / 1 opposed. Annotation: for use as a ripening agent for bananas only.

459 Discussion: Craig moved and it was seconded by Michael Sligh to restrict its use as a ripening

460 agent for bananas only. Fred noted that FVO does allow its use to prevent other problems and is

461 actively seeking an alternative, but that there is no alternative currently. Merrill questioned the

462 nutritional properties of foods that are ripened by a blast of ethylene gas. Gene noted that it is

463 essential for controlled ripening over long distances. Michael Sligh moved and it was seconded

464 by Kathleen to phase ethylene out over a five-year period. Vote: 3 aye / 9 opposed / 2

465 abstentions. Motion failed.

466 **Glycerin** - Reviewed by Joe Montecalvo, Rich Theuer, and Mary Mulry.

467 Determined to be synthetic; Vote - Unanimous.

468 The NOSB's decision is to allow this material for use in organic food processing;

Vote - Unanimous. Annotation: Must be produced by hydrolysis of fats and oils.

470 **Hydrogen Peroxide** - Reviewed by Vivian Purdy and Amigo Cantisano.

471 Determined to be synthetic; Vote - Unanimous (1 absent).

472 The NOSB's decision is to allow this material for use in **organic food processing and organic**

473 **crop production**. Vote - Unanimous (1 absent).

474 **Magnesium Chloride (non-synthetic)** - Reviewed by Joe Montecalvo and Rich Theuer.

475 Determined to be non-synthetic; Vote - Unanimous.

476 The NOSB's decision is to prohibit the use of non-synthetic magnesium chloride (from sea

477 water) in organic foods (95% and above); Vote: 12 aye / 2 opposed. The NOSB's decision is

478 also to prohibit the use of non-synthetic magnesium chloride (from sea water) in foods made with

479 organic ingredients (50%-95%); Vote: 12 aye / 2 opposed.

480 **Magnesium Chloride (Synthetic)** - Reviewed by Joe Montecalvo and Rich Theuer.

481 Determined to be synthetic; Vote - Unanimous.

482 The NOSB's decision is to allow synthetic magnesium chloride for use in organic food

483 processing; Vote: 13 aye / 1 opposed.

484 Annotation: Allowable only in the synthetic form if extracted from sea water. Magnesium

485 chloride produced by synthetic processes (e.g., hydrochloric acid reaction) is not allowable.

486 Unrefined *non-synthetic magnesium chloride (nigari)* is not recognized by FDA as an allowed

487 food ingredient.

488 **Nutrient Vitamins and Minerals** - Reviewed by Rich Theuer, Mary Mulry, Joe Montecalvo.

489 Determined to be synthetic; Vote - Unanimous.

490 The NOSB's decision is to allow this material for use in organic food processing;

491 Vote: 10 aye / 4 opposed. Annotation: Accepted for use in organic foods for enrichment or

492 fortification when required by regulation or recommended by an independent professional

493 organization.

494 **Ozone** - Reviewed by Rich Theuer and Joe Montecalvo.

495 Determined to be synthetic; Vote - Unanimous.

496 The NOSB's decision is to allow this material for use in organic food processing;

497 Vote - Unanimous.

498 **Potassium Hydroxide** - Reviewed by Rich Theuer and Joe Montecalvo.

499 Determined to be synthetic; Vote: 10 aye / 0 opposed / 4 absent.

500 The NOSB's decision is to allow this material for use in organic food processing;

501 Vote: 9 aye / 2 opposed / 1 abstention / 2 absent.

502 Annotation: Prohibited for use in lye peeling of fruits and vegetables and where non-synthetic

503 sodium carbonate is an acceptable substitute.

- 504 Tartaric Acid (Made from grape wine)**
505 Determined to be non-synthetic; Vote - Unanimous (1 absent).
506 The NOSB's decision is to allow this material for use in organic food processing;
507 Vote - Unanimous (1 absent).
- 508 Tartaric Acid (Made from malic acid)**
509 Determined to be synthetic; Vote - Unanimous (1 absent).
510 The NOSB's decision is to allow this material for use in organic food processing;
511 Vote: 10 aye / 4 opposed.
- 512 Potassium Acid Tartrate (or Potassium Tartrate made from tartaric acid) - Reviewed by**
513 Rich Theuer and Joe Montecalvo. Determined to be synthetic; Vote - Unanimous.
514 The NOSB's decision is to allow this material for use in organic food processing;
515 Vote: 12 aye / 1 opposed / 1 absent. Discussion: Sligh questioned the essentialness of this
516 material. Craig moved and it was seconded by Merrill to accept the following Annotation: *Shall*
517 *be derived from tartaric acid derived from grapes.* Vote: 6 aye / 6 opposed / 1 abstention / 1
518 absent. The motion failed, and there is no annotation for this material.
- 519 Sodium Phosphates - Reviewed by Bob Durst, Rich Theuer, and Joe Montecalvo.**
520 Determined to be synthetic; Vote - Unanimous.
521 The NOSB's decision is to allow this material for use in organic food processing;
522 Vote: 12 aye / 2 opposed. Discussion: Jay and Merrill both expressed the opinion that sodium
523 phosphates should be annotated. Fred moved to annotate, limiting its use as a boiler water
524 additive. Before there was a vote, Jay withdrew his motion and moved to table --
525 Vote: 4 aye / 9 opposed / 1 absent. Motion failed. Michael Sligh then followed with a motion
526 for the annotation: "Use restricted to dairy foods". Vote: 12 aye / 2 opposed. Motion carried.
- 527 Tocopherols - Reviewed by Joe Montecalvo, Rich Theuer, and Mary Mulry.**
528 Determined to be synthetic; Vote: 13 aye / 1 opposed.
529 The NOSB's decision is to allow this material for use in organic food processing;
530 Vote: 12 aye / 2 opposed. Annotation: Must be derived from vegetable oil when rosemary
531 extracts are not a suitable alternative.
- 532 Magnesium Stearate - Reviewed by Joe Montecalvo and Rich Theuer.**
533 Determined to be synthetic; Vote - Unanimous.
534 This material is prohibited for use in organic food processing (95% and above);
535 Vote: 4 aye / 9 opposed / 1 abstention. However, the NOSB does allow for the use of this
536 material in foods "made with organic ingredients". Vote: 12 aye / 2 opposed.
- 537 Ammonium Phosphate - Reviewed by Joe Montecalvo, Rich Theuer, Bob Durst.**
538 Determined to be synthetic; Vote - Unanimous.
539 This material is prohibited for use in organic food processing (95% and above).
540 Vote: 0 aye / 13 opposed / 1 absent. This material is also prohibited for foods labeled as "made

- 541 with organic ingredients” (50% - 95%). Vote: 6 aye / 3 opposed / 5 abstentions.
542 Discussion: There was also a motion to reconsider this material, allowing it for use as a yeast
543 food in wine making. Vote: 7 aye / 4 opposed / 3 abstentions. Motion failed.
- 544 **Colloidal Silica** - Reviewed by Joe Montecalvo, Rich Theuer, and Bob Durst.
545 Determined to be synthetic; Vote: 12 aye / 0 opposed / 2 absent.
546 This material is prohibited for use in organic food processing (95% and above).
547 Vote: 1 aye / 11 opposed / 2 absent. This material is also prohibited for foods labeled as “made
548 with organic ingredients” (50% - 95%). Vote: 3 aye / 9 opposed / 2 absent.
- 549 **Nisin** - Reviewed by Joe Montecalvo and Rich Theuer.
550 Determined to be synthetic; Vote: 10 aye / 3 opposed. This material is prohibited for use in
551 organic food processing (95% and above). Vote - Unanimous. This material is also prohibited
552 for use in foods labeled as “made with organic ingredients” (50% - 95%). Vote - Unanimous.
- 553 **Sodium Tartrate** - Reviewed by Joe Montecalvo and Rich Theuer.
554 Determined to be synthetic; Vote: 13 aye / 0 opposed / 1 absent. This material is prohibited for
555 use in organic food processing (95% and above). Vote: 8 aye / 2 opposed / 3 abstention /
556 1 absent. This material is also prohibited for use in foods labeled as “made with organic
557 ingredients” (50% - 95%). Vote - Unanimous. Discussion: Rich noted that citric acid is a
558 suitable non-synthetic alternative for this material. It was also pointed out that this material is
559 used extensively in wine production.
- 560 **Sorbic Acid** - Reviewed by Joe Montecalvo and Rich Theuer.
561 Determined to be synthetic; Vote - Unanimous. This material is prohibited for use in organic
562 food processing (95% and above). Vote - Unanimous. This material is also prohibited for use in
563 foods labeled as “made with organic ingredients” (50% - 95%). Vote - Unanimous.
564 Discussion: Margaret Wittenberg mentioned that this material is used in cheese making and is
565 also used in dried fruit.
- 566 **Baking Powder (Aluminum-Free)** - Reviewed by Joe Montecalvo and Rich Theuer.
567 There was no determination made on this material. Craig moved and it was seconded by Jay to
568 send this material back to the processing committee. Vote: 10 aye / 2 opposed / 2 absent. Craig
569 also moved to add non-modified starches to the TAP review process and it was seconded by Bob.
570 Vote - Motion carried unanimously.
571 (This material’s component parts were all reviewed and approved for use in organic foods.)
- 572 **Crops Materials**
- 573 **Alcohol (Ethanol)** - Reviewed by Vivian Purdy and John Clark.
574 Determined to be synthetic; Vote: Unanimous.
575 The NOSB’s decision is to allow this material for use in organic crop production;
576 Vote: Unanimous. Annotation: Permitted for use as a disinfectant.

- 577 **Alcohol (Isopropyl)** - Reviewed by Vivian Purdy, John Clark and Marta Engel.
578 Determined to be synthetic; Vote: 12 aye / 0 opposed / 2 absent.
579 The NOSB's decision is to allow this material for use in organic crop production;
580 Vote: 13 aye / 1 opposed. Annotation: Permitted for use as a disinfectant.
581 Discussion: Michael Sligh moved and it was seconded by Jay to return brewery wastes back for
582 further review to the TAP. Motion carried unanimously. Also, Rod moved and it was seconded
583 by Tom Stoneback to send alcohol (made from methane) for further review to the TAP. Motion
584 carried unanimously.
- 585 **Ammonium Carbonate** - Reviewed by John Clark and Helmut Reidl.
586 Determined to be synthetic; Vote: 12 aye / 0 opposed / 2 absent.
587 The NOSB's decision is to allow this material for use in organic crop production;
588 Vote - Unanimous. Annotation: For use as bait in insect traps only. Cannot be in direct contact
589 with crop or soil.
- 590 **Antibiotics (Avermectin)** - Reviewed by Jerry Feitelson, Philip VanBuskirk, and Gregg Young.
591 Determined to be synthetic; Vote - Unanimous.
592 The NOSB has determined that this material is unacceptable for use in organic crop production;
593 Vote: 3 aye / 6 opposed / 4 abstentions.
- 594 **Antibiotics (Streptomycin sulfate)** - Reviewed by Phillip VanBuskirk, Greg Young, and Jerry
595 Feitelson. Determined to be synthetic; Vote - Unanimous.
596 The NOSB's decision is to allow this material for use in organic crop production;
597 Vote: 10 aye / 3 opposed. Annotation: Permitted for use as a fireblight control in apples and
598 pears only. To be reviewed again in two years.
- 599 **Antibiotics (Terramycin-Oxytetracycline calcium complex)** - Reviewed by Phillip
600 VanBuskirk, Gregg Young, and Jerry Feitelson. Determined to be synthetic; Vote - Unanimous.
601 The NOSB's decision is to allow this material for use in organic crop production;
602 Vote: 10 aye / 1 opposed / 2 abstentions. Annotation: To be reviewed again in two years.
603 Discussion: Gene Kahn will organize a taskforce to further explore antibiotic use in crop
604 production.
- 605 **Aquatic Plant Extracts (Other than hydrolyzed)** - Reviewed by Donald Blakeney, Bruce
606 Spencer. Determined to be synthetic; Vote: 11 aye / 2 absent.
607 The NOSB's decision is to allow this material for use in organic crop production;
608 Vote: 10 aye / 1 abstention / 2 absent. Annotation: Extraction process is limited to the use of
609 potassium hydroxide and sodium hydroxide. The amount of the solvent used is not to exceed the
610 amount necessary for extraction.
- 611 **Chlorine Bleach (Calcium hypochlorite, sodium hypochlorite, chlorine dioxide)** -
612 Reviewed by Joe Montecalvo, Marta Engel, Rich Theuer, Walter S. Jeffery, and Chris Milne.
613 Determined to be synthetic; Vote - Unanimous (2 absent).

615 The NOSB's decision is to allow this material for use for **organic crop production, organic**
616 **food processing, and organic livestock production.** Vote: 9 aye / 2 opposed / 2 absent.
617 Annotation: Allowed for disinfecting and sanitizing food contact surfaces. Residual chlorine
618 levels for washwater in direct crop or food contact and in flush water from cleaning irrigation
619 systems that is applied to crops or fields cannot exceed the maximum residual disinfectant limit
620 under the Safe Drinking Water Act (currently 4mg/L expressed as Cl₂). This substance is to be
reviewed again in two years.

621 **Coppers, Fixed** - Reviewed by Brian Baker and Eric Sideman.

622 Determined to be synthetic; Vote - Unanimous.

623 The NOSB's decision is to allow this material for use in organic crop production;

624 Vote - Unanimous. Annotation: May be used for disease control. May not be used as an

625 herbicide. Shall be used in a manner that prevents excessive copper accumulation in the soil.

626 **Lignin Sulfonate** - Reviewed by Brian Baker, Philip VanBuskirk, and Diana Tracy.

627 Determined to be synthetic; Vote - Unanimous (2 absent).

628 The NOSB's decision is to allow this material for use in organic crop production;

629 Vote: 11 aye / 1 opposed / 1 absent. Annotation: Allowed for use with micronutrients and

630 macronutrients and as a chelating agent. Also allowed for use as a dust suppressant and a

631 flotation agent.

632 **Magnesium Sulfate** - Reviewed by John Clark and Bart Hall.

633 Determined to be synthetic; Vote - Unanimous (2 absent).

634 The NOSB's decision is to allow this material for use in organic crop production;

635 Vote - Unanimous (2 absent). Discussion / Annotation: Gene noted that this material is usually

636 applied to the soil at a rate of 20 lbs per acre. Merrill moved and it was seconded by Gene to add

637 the following Annotation: "Allowed for use as a soil amendment with a documented magnesium

638 deficiency". Vote - Motion carried unanimously (1 absent).

639 **Newspaper Mulch** - Reviewed by Sam Cotner, Eric Sideman, and Joseph Heckman.

640 Determined to be synthetic; Vote - Unanimous (1 absent).

641 The NOSB's decision is to allow this material for use in organic crop production;

642 Vote: 12 aye / 1 opposed / 1 absent. Discussion / Annotation: Tom Stoneback noted that the

643 printing industry is now using state of the art equipment and supplies. Most of the inks tend to

644 be soy-based. Gene moved and it was seconded by Bob to accept the annotation -- "Glossy paper

645 and colored ink paper is prohibited." Vote: 10 aye / 3 opposed / 1 absent. Motion carried.

646 **Petroleum Distillates** - Reviewed by Philip VanBuskirk, Brian Baker, and Chris Milne.

647 Determined to be synthetic; Vote - Unanimous.

648 The NOSB's decision is to allow this material for use in organic crop production;

649 Vote: 11 aye / 2 opposed. Annotation: Restricted to petroleum derivatives with a 50% boiling

650 point at 10mm mercury pressure between 415 degrees F° and 440 degrees F° ± 8 degrees F°.

651 Aromatic petroleum solvents including, but not limited to, benzene, naphthalene, toluene and

652 xylene are prohibited. Allowed for use in organic production as suffocating or stilet oils on
653 foliage and as inert ingredients. May be applied to dormant perennials. Direct application to
654 harvested crop is prohibited. Petroleum distillates may not be used as either weed or carrot oils
655 in organic production. Land covered with petroleum derived pavement and road oils cannot be
656 certified organic for 3 years following application.

657 Discussion: Zea Sonnabend noted that petroleum distillates are used as carriers and fillers and
658 are necessary ingredients. Merrill commented on the need to move away from a reliance on
659 chemicals, and suggested the addition of “woody perennials” to the annotation. Bill Wolf then
660 followed by stating that the vegetable-based dormant oils aren’t yet registered, and that all of the
661 dormant oils currently on the market are petroleum based. He also noted that they are most
662 commonly used in pest control, and pose the least ecological impact.

663 **Plastic Mulch and Covers [Petroleum based; other than poly-vinyl chloride (PVC)] -**
664 Reviewed by Sam Cotner and Richard Harwood. Determined to be synthetic;
665 Vote - Unanimous. The NOSB’s decision is to allow this material for use in organic crop
666 production; Vote - Unanimous. Annotation: PVC is prohibited. Petroleum-based plastics other
667 than PVC are acceptable. Restricted by OFPA as having to be removed at the end of each
668 growing or harvest season; also, shall not be incorporated into the soil or left in the field to
669 decompose.

670 **Sticky Traps and Barriers -** Reviewed by Helmut Riedl, John Clark, and Vivian Purdy.
671 Determined to be synthetic; Vote - Unanimous (2 absent).
672 The NOSB’s decision is to allow this material for use in organic crop production;
673 Vote - Unanimous (2 absent).

674 **Vitamin D1, C, and E -** Reviewed by David Knauff, Donald Blakeney, and Amigo Cantisano.
675 Determined to be synthetic; Vote: 10 aye / 3 absent.
676 The NOSB’s decision is to allow this material for use in organic crop production;
677 Vote: 11 aye / 2 absent.

678 **Vitamin D3 -** Reviewed by Gregg Young and Donald Blakeney.
679 Determined to be synthetic; Vote - Unanimous.
680 The NOSB’s decision is to allow this material for use in organic crop production;
681 Vote - Unanimous. Annotation: Permitted as a rodenticide.

682 **Arsenate Treated Lumber -** Reviewed by Chris Milne, Eric Sideman, and Sam Cotner.
683 Determined to be synthetic; Vote - Unanimous.
684 The NOSB has determined that this material is unacceptable for use in organic crop production;
685 Vote - Unanimous. Commentary: Effective on the publication date of the final rule, the use of
686 arsenate (and other prohibited materials) treated lumber is prohibited for new construction and
687 replacement purposes. Certification applicants shall provide records to the certifying agent that
688 arsenate (and other prohibited materials) treated lumber was not installed within 36 months
689 immediately preceding the initial harvest date of any organic agricultural products. In no case

691 shall arsenate (and other prohibited materials) treated lumber be allowed in installations in contact with the soil and used to grow vegetables (soil beds).

692 **Gypsum By-Product (From flue trappings and fertilizer manufacture, and from drywall**
693 **manufacture)** - Reviewed by Diana Tracy, John Clark, and David Knauft. Determined to be
694 synthetic; Vote - Unanimous.

695 The NOSB has determined that this material is unacceptable for use in organic crop production;
696 Vote: 4 aye / 9 opposed. Discussion: It was noted (in terms of tonnage) that organic farmers
697 buy a significantly large amount of gypsum each year. There are two primary sources-mined and
698 mixed. Unfortunately, one is not distinguishable from the other.

699 **Killed Microbial Pesticide (*Pseudomonas fluorescens with Bt gene*)** - Reviewed by Margaret
700 Mellon, Brian Baker, Jerry Feitelson, Daniel Pimentel, and Philip VanBuskirk.

701 Determined to be synthetic; Vote - Unanimous.

702 The NOSB has determined that this material is unacceptable for use in organic crop production;
703 Vote: 3 aye / 10 opposed.

704 Discussion: Bill Wolf spoke against the allowance of killed microbials, as the political climate is
705 not right at this time for their approval. He also noted that the technology definitely needs to be
706 looked at -- it's not all bad. He suggested that the Board take time to sort out all the relevant
707 issues, and vote on it at a later time. Michael Sligh concurred, and suggested a taskforce take
708 another look at the material. Rod continued, and mentioned the possibility of States requiring the
709 use of genetically engineered forms of materials in the future. Gene commented on the fact that
710 there is much information available on this material and the Board should not base a discussion
711 on fear and superstition. He also noted that the rejection of this material would be a major
712 setback to the organic industry. Brent Wiseman spoke of tests already conducted on these
713 materials, and that many have already been reviewed and determined to be safe. He also noted
714 that they should be reviewed again, prior to approval for use in organic production. Tom Tomas
715 noted that organic certifiers already reject this technology. Jay also concurred with the majority,
716 and that it is okay for organics to reject biotechnology, as organics built on caution. Eric
717 Kindberg noted that this is currently allowed only because it is determined to be dead, and it is
718 not the same as live microbials; it is used for gypsy moth control currently. Brian Baker
719 expressed the view that it is okay to consider its use, but at this time he is not prepared to make a
720 judgement on the material. Craig concurred with Gene and Brian, but noted that the industry is
721 not prepared for the consumer backlash that is certain to follow its approval. K. Chandler
722 rounded out the discussion by noting that IFOAM's prohibition of this material takes away tools
723 from farmers by categorically rejecting this technology which has the potential to overcome the
724 current chemical approach that is taken by conventional agriculture. Kathleen's concerns for the
725 material centered around its compatibility with sustainability and the political backlash that was
726 mentioned by Bill and Craig.

727 **Leather By-Product** - Reviewed by Brian Baker, Paul Sachs, Walter Glinsmann, and Bart Hall.
728 Determined to be synthetic; Vote - Unanimous (1 absent).

729 The NOSB has determined that this material is unacceptable for use in organic production;

730 Vote: 5 aye / 8 opposed. Discussion: Bob began the discussion by noting that he doesn't use the
731 product, but would like to consider its appropriateness for organic production. His concern
732 centers around the 3% chromium in the finished product. K. Chandler followed with the
733 observation that people take chromium tablets and he personally wants more information on its
734 effects in the soil. Bruce Krantz of the Hynite corporation explained that EPA has removed
735 chromium from its "concerned" list, and that chromium is not a problem, as it had been
736 considered in the past. Brian spoke against the material, specifically the application of biocides
737 and other synthetic materials that are used in the processing of the hides. Bob moved and it was
738 seconded by Gene to exclude dyed and finished leather by-products - Vote: 11 aye / 1 opposed /
739 1 abstention. Motion carried. Following the prohibition of this material, Jay moved and it was
740 seconded by Gene for the NOSB to develop a policy on alternative use of waste products (from
741 organic systems). Motion carried unanimously.

742 **Potassium Nitrate (Niter)** - Reviewed by Walter Jeffery, Brian Baker, and Bart Hall.
743 Determined to be synthetic; Vote: 10 aye / 3 absent.
744 The NOSB has determined that this material is unacceptable for use in organic crop production.
745 Vote: 12 aye / 0 opposed / 1 absent.

746 **Gypsum By-Product (Mined Source)** - Reviewed by Diana Tracy, John Clark, and David
747 Knauff. Determined to be non-synthetic; Vote - Unanimous (2 absent).
748 The NOSB's decision is that this material should not be placed on the Prohibited Natural(s) List.
749 Vote - Unanimous (2 absent).

750 **Potassium Chloride (Muriate of Potash)** - Reviewed by Walter Jeffery and Joseph Heckman.
751 Determined to be non-synthetic; Vote - Unanimous (1 absent).
752 The NOSB's decision is that this material should not be placed on the Prohibited Natural(s) List.
753 Vote: 0 aye / 11 opposed / 2 abstentions / 1 absent.
754 Commentary: Only the mined source is considered non-synthetic. Any use shall be in a manner
755 that prevents excessive chloride accumulation in soils. Soil testing may be required in both
756 treated and untreated adjacent soils to verify absence of chloride build-up.

757 **Sodium Bicarbonate** - Reviewed by Eric Sideman and Walter Jeffery.
758 Determined to be non-synthetic; Vote - Unanimous (2 absent).
759 The NOSB's decision is that this material should not be placed on the Prohibited Natural(s) List.
760 Vote: 1 aye / 12 opposed / 2 absent.

761 **Sulfur Dioxide** - Reviewed by Walter Jeffery and Brian Baker.
762 This material was tabled by the NOSB and will be sent back to the TAP for further review.

763 *The following petitioned materials are deemed by the NOSB to be synthetic, incompatible with*
764 *organic farming systems, prohibited by the Organic Foods Production Act of 1990 and should*
765 *not be reviewed by the Technical Advisory Panel:*

766 Benomyl Captan Glyphosate Methoxychlor Thiram.

767 **Livestock Materials**

768 **Alcohol (Ethanol)** - Reviewed by John Clark, Vivian Purdy, and Marta Engel.

769 Determined to be synthetic; Vote - Unanimous (1 absent).

770 The NOSB's decision is to allow this material for use in organic livestock production;

771 Vote: 13 aye / 0 opposed / 1 abstention.

772 Annotation: Allowed for use in medical treatments and as a disinfectant. Prohibited for use as a
773 feed additive.

774 **Alcohol (Isopropyl)** - Reviewed by Vivian Purdy, John Clark, and Marta Engel.

775 Determined to be synthetic; Vote: 11 aye / 0 opposed / 2 abstentions.

776 The NOSB's decision is to allow this material for use in organic livestock production;

777 Vote: 13 aye / 1 opposed. Annotation: Approved for use only as a disinfectant.

778 **Alcohol (Methanol)** - Rod moved and it was seconded by Tom Stoneback to send this material
779 back to the TAP for more review. Motion passed unanimously.

780 **Brewery Wastes** - Michael Sligh moved and it was seconded by Jay to send this material back to
781 the livestock committee for review as a feed ingredient. Motion passed unanimously.

782 **Chlorine Bleach (Calcium hypochlorite, sodium hypochlorite, chlorine dioxide)** -

783 Reviewed by Joe Montecalvo, Marta Engel, Rich Theuer, Walter S. Jeffery, and Chris Milne.

784 Determined to be synthetic; Vote - Unanimous.

785 Annotation: Allowed for disinfecting and sanitizing food contact surfaces. Residual chlorine

786 levels for washwater in direct crop or food contact and in flush water from cleaning irrigation

787 systems that is applied to crops or fields cannot exceed the maximum residual disinfectant limit

788 under the Safe Drinking Water Act (currently 4mg/L expressed as Cl₂). This substance is to be

789 reviewed again in two years.

790 **Copper Sulfate** - Reviewed by Lynn Brown and William Zimmer.

791 Determined to be synthetic; Vote: 11 aye / 1 abstention / 1 absent.

792 The NOSB's decision is to allow this material for use in organic livestock production;

793 Vote: 12 aye / 1 abstention.

794 Annotation: For topical use or as an essential nutrient.

795 **Electrolytes** - Reviewed by William Zimmer, Marta Engel, and Lynn Brown.

796 Determined to be synthetic; Vote - Unanimous.

797 The NOSB's decision is to allow this material for use in organic livestock production;

798 Vote - Unanimous. Annotation: May not contain antibiotics.

799 **Glucose** - Reviewed by Marta Engel and Lynn Brown.

800 Determined to be synthetic; Vote - Unanimous.

- 801 The NOSB's decision is to allow this material for use in organic livestock production;
802 Vote - Unanimous.
- 803 **Hydrated Lime (Calcium Hydroxide)** - Reviewed by Brian Baker.
804 Determined to be synthetic; Vote - 11 aye / 1 opposed / 1 absent.
805 The NOSB's decision is to allow this material for use in organic livestock production;
806 Vote: 11 aye / 1 abstention / 1 absent. Annotation: Not permitted for soil application or to
807 cauterize mutilations or deodorize animal wastes.
- 808 **Local Anesthetics (Lidocaine and Procaine only)** - Reviewed by Marta Engel and William
809 Zimmer. Determined to be synthetic; Vote - Unanimous.
810 The NOSB's decision is to allow these materials (lidocaine and procaine) for use in organic
811 livestock production. Vote - Unanimous.
812 Discussion / Annotation: Lynn Coody noted that producers usually administer local anesthetics,
813 and that additional anesthetics should be used only under the general supervision of a licensed
814 veterinarian. Merrill moved and it was seconded by Jay to add the following annotation to the
815 approved local anesthetics: *Use requires a withdrawal period of 90 days in livestock intended for*
816 *slaughter and 7 days in dairy animals.* Vote: 11 aye / 3 opposed. Motion carried.
- 817 **Magnesium Sulfate (Mined Epsom Salt)** - Reviewed by Marta Engel, Lynn Brown, and
818 William Zimmer. Determined to be non-synthetic; Vote: 9 aye / 4 abstentions / 1 absent.
819 The NOSB's decision is that this material should not be placed on the Prohibited Natural(s) List.
820 Vote - Unanimous (2 absent).
- 821 **Magnesium Sulfate (synthetic)** - Reviewed by Marta Engel, Lynn Brown, and William Zimmer.
822 Determined to be synthetic; Vote: 12 aye / 1 absent / 1 abstentions.
823 The NOSB's decision is to allow this material for use in organic livestock production;
824 Vote: 12 aye / 2 opposed. Discussion: Brian Baker noted that the non-synthetic form of this
825 material is currently allowed and is in use. Merrill moved and it was seconded by Jay to add the
826 Annotation: "*External use only on non-ruminants only.*" Vote: 2 aye / 12 opposed. Motion
827 fails.
- 828 **Milk Replacers** - Reviewed by Lynn Brown and Marta Engel.
829 Determined to be synthetic; Vote: 12 aye / 0 opposed / 2 abstentions.
830 The NOSB's decision is to allow this material for use in organic livestock production;
831 Vote - Unanimous (1 absent). Annotation: Emergency use only when fresh milk is not available.
832 Milk replacers based on non-milk products or from BST treated animals are not permitted. No
833 antibiotics may be added. Milk from certified organic animals is preferred.
- 834 **Mineral Oil** - Reviewed by William Zimmer, John Clark, Brian Baker, and Marta Engel.
835 Determined to be synthetic; Vote - Unanimous (1 absent).
836 The NOSB's decision is to allow this material for use in organic livestock production;
837 Vote - Unanimous. Annotation: For topical use and as a lubricant.

Nutrient Vitamins - Reviewed by William Zimmer and Lynn Brown.

839

Determined to be synthetic; Vote - Unanimous.

840

The NOSB's decision is to allow synthetic vitamins for use in organic livestock production;

841

Vote: 10 aye / 2 opposed / 1 abstention / 1 absent. Annotation: Limited to those approved by the Food and Drug Administration for livestock use.

842

843

Discussion: This discussion initially began as the discussion on *Folic Acid* and was redirected to the evaluation of synthetic vitamins as a group. Fred moved and it was seconded by Rod to evaluate vitamins as a category, rather than to review each individual vitamin.

844

845

Vote: 10 aye / 2 opposed / 2 absent. Motion carried. Merrill expressed strong objections to acceptance of materials in a category format and asked that each substance be individually reviewed.

846

847

848

849

Nutrient Minerals - Reviewed by William Zimmer and Lynn Brown.

850

Determined to be synthetic; Vote - Unanimous (1 absent).

851

The NOSB's decision is to allow synthetic mineral for use in organic livestock production;

852

Vote: 10 aye / 2 opposed / 1 abstention / 1 absent.

853

Annotation: Limited to those approved by the Food and Drug Administration for livestock use.

854

Oxytocin - Reviewed by William Zimmer, Marta Engel, and Lynn Brown.

855

Determined to be synthetic; Vote - Unanimous (1 absent).

856

The NOSB's decision is to allow this material for use in organic livestock production;

857

Vote - Unanimous (1 absent). Annotation: No routine or long term use. May be used only when necessary to allow an animal to let down milk during the first few days of lactation and also for other approved veterinarian uses.

858

859

860

Alcohol (Derived from fermentation) - Reviewed by John Clark and Marta Engel.

861

The NOSB has determined that this material is non-synthetic and not within the scope of the National List.

862

863

Probiotics - Reviewed by Lynn Brown, William Zimmer, and Marta Engel.

864

Determined to be non-synthetic; Vote: 9 aye / 0 opposed / 3 abstention.

865

The NOSB has determined that this material is non-synthetic and not within the scope of the National List.

866

867

Colostrum Whey Antibodies - Reviewed by Lynn Brown and Richard Krengel.

868

Determined to be synthetic; Vote: 7 aye / 6 opposed / 1 absent.

869

Discussion: After considerable discussion and debate over the synthetic / non-synthetic status of colostrum, the following votes were taken:

870

871

1) Is colostrum from livestock not treated with BST synthetic?

872

Vote: 0 aye / 11 no / 3 absent.

873

2) Should non-synthetic colostrum be placed on the National List as a prohibited natural?

874

0 aye / 11 no / 3 absent.

- 875 3) Is colostrum from livestock treated with BST synthetic?
876 9 aye / 0 no / 3 abstentions / 2 absent.
877 4) Should synthetic colostrum be prohibited for use in organic livestock production?
878 12 aye / 0 no / 2 absent.

879 Following the aforementioned votes, the NOSB moved to table this material. Motion passed
880 unanimously.

881 **November 3, 1995**

882 The final session of the NOSB meeting was called to order at 8:00 a.m. by chairperson Bob
883 Anderson.

884 Members in attendance were: Tom Stoneback, Craig Weakley, Dean Eppley, Don Kinsman,
885 Merrill Clark, Michael Sligh, Bob Anderson, Gene Kahn, K. Chandler, Rod Crossley, Kathleen
886 Merrigan, Margaret Wittenberg, and Jay Friedman. Tom Tomas was present as the certifying
887 agency advisor to the NOSB.

888 National Organic Program staff members present from USDA were: Michael Hankin and Toni
889 Strother.

890 The TAP coordinators and materials advisors present were: Zea Sonnabend, John Brown, Brian
891 Baker, Lynn Coody, and Bill Wolf.

892 Kathleen Merrigan moved and it was seconded by Don Kinsman to adopt the arsenate treated
893 lumber resolution.² There was one friendly amendment - add "and lumber treated with other
894 prohibited materials" to the title and throughout the document. Motion passed unanimously.

895 Lynn Coody followed with a continuation of the antibiotics presentation.³ It was noted that two
896 antibiotics have been historically approved for disease control, while Avermectin is a miticide for
897 which other options exist.

898 Following the antibiotics presentation, an expanded discussion on killed microbial pesticide
899 ensued.⁴

900 Michael Sligh and Jay Friedman left the meeting at 9:25 a.m. For voting purposes, there were

²See Arsenate Treated lumber under crops materials, page 37.

³See Antibiotics (Avermectin, Streptomycin sulfate, and Terramycin-oxytetracycline calcium complex) under crops materials, page 32-33. Also, see attachment 1.

⁴See Killed Microbial pesticide under crops materials, page 38-39.

now 11 voting Board members.

902 Immediately following the conclusion of the materials review and voting, Bob Anderson moved
903 and it was seconded by Dean to accept the Orlando minutes. Craig suggested the word
904 “seconded” be added at line 1074 after the word ‘Chandler’ (No objections).

905 The minutes were subsequently approved by a vote of 9-1, and the NOSB instructed USDA staff
906 to incorporate all previous written revisions submitted by NOSB members, except for the
907 requested vote changes by Merrill.

908 Margaret Wittenberg was selected as the new chairperson of the Processing, Handling, and
909 Labeling Committee (11-0).

910 K. Chandler moved and it was seconded by Merrill to have the USDA mail out the NOSB
911 definition of “organic” to the public mailing list. Motion carried unanimously.

912 Subsequently, the NOSB passed the following resolutions:

913 *Fiber Processing Standards* - USDA is requested to incorporate processing standards for fibers
914 into the National Organic Program as soon as possible. Because a specific NOSB
915 recommendation on such standards cannot be made before the next meeting of the Board, USDA
916 is requested to use the organic fiber processing standards established by the Texas Department of
917 Agriculture as well as consultations with members of the NOSB Processing, Handling and
918 Labeling Committee as resources for the development of such standards. Craig then moved and
919 it was seconded by Don Kinsman to approve the resolution. Tom Stoneback expressed his
920 support of the fiber resolution. Motion carried unanimously.

921 *Comment Period for the Proposed Rule* - The public is extremely interested in the development
922 of the national organic program. In order to ensure adequate opportunity for public input on what
923 will be a lengthy and complex proposed rule, we request and urge the USDA to provide a
924 minimum 90 day comment period. Motion carried unanimously.

925 Bob Anderson then inquired as to how the Board would move ahead on the materials review, and
926 whether or not Zea will continue to serve as the NOSB TAP Coordinator. Kathleen expressed
927 her support for Zea’s continuation. However, Zea said that she was not interested in another
928 contract to continue work. She went on to question what will be done with the monies remaining
929 on John Brown’s contract and what his future role will be. She also expressed her uncertainty as
930 to the USDA’s ability to coordinate the TAP process, and the need for oversight of the USDA.
931 Kathleen then moved forward the *Technical Advisory Panel Review Coordinator Resolution*:
932 We urge the Secretary to find adequate resources to retain an independent consultant recognized
933 as an expert in organic production, to coordinate the technical advisory panel review process.
934 Her resolution was unanimously approved.

935 Also at the request of Kathleen, the Executive Committee agreed to develop a policy on what

936 should be mailed to the USDA/NOSB mailing list. The Executive committee will also decide
937 how to get a sense of the NOSB activities between meetings, in view of the reduced funding.
938 Ms. Merrigan will also lead efforts to coordinate current and past NOSB members in preparing
939 responses to the USDA proposed rule for the National Organic Program.

940 The ethics document prepared by Fred Kirschenmann was unanimously tabled. The Board also
941 unanimously consented on a Central Midwest location for the next NOSB meeting.

942 The meeting was adjourned at 10:35 a.m.