Section 4

Na True

4.2.1 Non-organic ingredients
The non-organic ingredients shall not be produced using excluded methods, sewage sludge, ionizing radiation or genetically engineered organisms (GEOs) or its product, nor shall they contain any petroleum compounds except as allowed for specifically in this Standard. ***Reason: 'genetically engineered organism or its product' added. It is important to exclude not only GEOs but their products as well.***

4.2.2.1 *The labeling of whole products or ingredients as organic is prohibited if those products or ingredients are created using any of the following:*
(…)
– Ingredients that have been made using any GEOs or its product;

C.3.1 First suggested screening method
Non-organic materials for "made with" products should be supplied with:
– an affidavit that a product is not from a GE (genetically engineered)/GMO (genetically modified organism) source or process;

The formulation should be changed to:
The use of genetically manipulated plants is forbidden. For certain raw materials it would have to be proved, using PCR, that they contain no genetically modified ingredients.

Rationale:
The aim is to protect the consumer against GMO s. This will be ensured by the requirement, which has to be fulfilled, that the raw ingredients be PCR negative.
This requirement should in any case be regulated according to raw materials. The problem of GMO only exists for some individual raw materials. It requires a great deal of effort if a GMO certificate is demanded for each and every raw material. For BDIH the target of only demanding such a certificate for critical raw materials (e.g. soya) has proved very effective.

4.2.2.1 *The labeling of whole products or ingredients as organic is prohibited if those products or ingredients are created using any of the following:*
(…) – Ingredients that have been processed with ionizing radiation;

Better: It is forbidden to treat raw materials of plant or animal origin and finished cosmetic products using ionizing radiation.

Ionizing radiation should be rejected because it causes structural changes. This is not the case for minerals. They are sterilised but their structure remains unchanged. For this reason the ban on ionizing radiation should refer to organic substances and finished

products. This requirement is covered by the definition for "ionizing radiation“. It reads as follows:

3.31 ionizing radiation: *Electromagnetic radiation whose waves contain energy sufficient to overcome the binding energy of electrons in atoms or molecules. Also (imprecisely) called radioactivity.*

According to this definition the term irradiation can only be used when the input energy is greater than the binding energy of the electrons in the atoms or molecules. This is not true in the case of the irradiation of minerals.

4.2.2.1:

See note on *3.4*. Under *4.2.2.1* a very limited selection of processes are described. It would be more consumer-friendly to integrate a comprehensible list of the manufacturing processes allowed and the raw materials allowed, as an appendix to the NSF Standard.

TerrEssentials

4.2.1 -- NO petroleum compounds whatsoever should be allowed.

Section 5

Na True

Table 5.1:

We would like to question why the use of certain processes means that certification as "organic" should no longer be possible.
Consumers see the difference between "made with organic xxx" and "95% organic" only as an expression of the organic material it contains, and not as a reflection of the manufacturing process of the raw materials.
We are of the opinion that for all those processes allowed under the NSF Standard the labelling as "organic" must be possible.
As already described above, for the calculation of "organic" that amount of the substance that has the potential to be organic (e.g. in glucosidation 98%) should be taken.

5.3. Cooking vegetable oils or animal fats with NOP-allowed alkali to make soap

Only vegetable fats should be allowed here.

5.3.2 Mined Ingredients

The wording should be changed to: Ingredients of mineral origin
Table 5.4. is far from complete. A great many mineral dyes are missing. So e.g. Mica CI 77019, Blue CI 77510, White CI 77163, Chlorophyll Copper CI 75810, Iron Oxides…

In the positive list of the BDIH over 20 mineral dyes and a great many other mineral raw materials are listed. Here too, it is apparent that a positive list which creates transparency for the consumer is necessary.

5.3.3 Prohibited Ingredient Types/Classes and Prohibited Specific ingredients

The numbering at this point is confusing: 5.3.3. should be changed to 5.4 and 5.3.4. to 5.5.

Arch Chemicals

The NSF's list of preservatives acceptable for "made with organic ingredients" products is quite limited. The following is a list of preservatives approved for use in certified "Made With Organic" products:

1. Benzoic Acid
2. Grapefruit Seed Extract
3. Potassium Lactate
4. Potassium Sorbate
5. Sodium Benzoate
6. Sorbic Acid
7. Benzyl Alcohol

This list is constricting to most, if not all, formulators and suppliers striving to create certified organic cosmetics.

Proposal:

Cosmocil CQ is a globally approved synthetic preservative with a low toxicity profile. It is not a paraben, isothiazolone, nor a formaldehyde donor and does not contain iodine. Made up of 20% solution of polyaminopropyl biguanide (PHMB), Cosmocil CQ is currently used in eye care (contact lens cleaner), baby products, and many other personal care products. In addition to its excellent safety profile, Cosmocil CQ is a broad spectrum, fast acting bactericide effective against both Gram negative and Gram positive bacteria, including Staphylococcus aureus and E. Coli, as well as the antibiotic resistant bacteria (MRSA and VRE) and other odor causing bacteria.

Arch Chemicals, Inc. proposes that Cosmocil CQ be included in the Preservatives Allowed in "Made With Organic" Products within the NSF Standard for Organic Personal Care Products.

TerrEssentials

5.1 -- (In describing the allowed processes of organic ingredients, the term "otherwise manufacturing" is a meaningless escape clause that opens the door for, essentially, any manufacturing process.) This section should be identical to the NOP.

5.3 -- Under "allowed processes," "cooking" processes that result in new compounds that are clearly synthetic should be disallowed.

5.3.1 -- Chemical preservatives, including "grapefruit/citrus seed extract," should NOT be allowed.

5.3.4 -- Commercial availability should go beyond the NOP, in that any manufacturer claiming an exemption for an agricultural ingredient as "commercially unavailable" should implement a plan, in writing, to grow that agricultural product so that they will have it for their manufactured product or re-formulate that product so as to not have any "unavailable" ingredients.

OCA

Minerals that have not undergone chemical washing or processing should be considered neutral in formulations.

* The Commercial Availability clause is a slippery slope. Currently, the majority of proposed processes would result in synthetic ingredients that are not currently allowed under the NOP. This is confusing to consumers, as indicated by results of surveys of organic consumers developed by the subsommittee last year (contact me if you would like a copy of those results).

On the issue of Commercial Availability, subcommittee votes resulted in a 50/50 split between those that thought the standard should allow conventional agriculturally derived feedstock (from genetically engineered and pesticide laden plants) and those that indicated that processed ingredients not allowed under the NOP should be required to be derived from organic feedstock. Our consumer surveys showed conclusively that people buying a product labeled as "Made with organic" would expect it to be in accordance with the NOP, or, at the very least, have the highly processed synthetic ingredients derived from organic feedstock. Despite this 50/50 split on the original vote, the proposed standard reflects the weaker side of that vote. I still feel this should be opened up for a wider vote when the committee addresses comments made on the standard.

If a Commercial Availability clause is the result of that vote, then this document needs to have more elaborate definitions of the criteria for assessing what specifically should be considered "Commercially Available" and what is not as well as who monitors the industry for changes to the current list. The current 3.11 definition of “Commercial Availability” is insufficient and vague. To note, it's next to impossible to remove something from the current NOP National List, and I suspect, this standard will be no different unless more verbiage is added --- assuming the majority of the committee even wants the Commercial Availability clause, which is questionable at this point, given the past vote. To exemplify, if this is not better defined, an ingredient that is considered in high enough quantity and commercially available to a modest sized manufacturer may not be considered “commercially available” to the Wal-marts of the world, thus creating zero impetus for a company to produce or use one of these synthetic ingredients made

from an organic feedstock. In short, with the current ambiguity, what's currently on this list will likely permanently remain on this list, which is a deep concern.

Dr. Bronner's Magic Soap

Section 5.3 notes that:
"Table 5.1 specifies Ecological Agricultural-Based Botano-chemical Processes that make ingredients that are not permitted under the NOP but are allowed for "Made with Organic" products under this Standard. The organic content contribution of the resulting ingredient to a finished product is also specified. Organic forms of ingredients made by these processes shall be used in "Made with Organic" products, if commercially available."

This is a straightforward requirement to use organic forms of ingredients produced by these processes, if commercially available. If they are not, then conventional may be used. However, in the Appendix, in table G2, is a position that is even more strict, in noting many ingredients that may never be used in conventional form, only organic form, regardless of whether that ingredient is commercially available. This stricter version reflects debates within the Composition Committee that went back and forth how strict to make things.

I believe though, that the position that is reflected in the actual body of the standard, is the correct and better version, in being more straightforward, and that the G2 table in the Appendix should remove the category designation "Ingredients currently not available in organic form, and not allowed in conventional form, but allowed once organic form is available". There should simply be a representative list of ingredients available in organic form, and not yet available in organic form.

* Also, there was a lot of back and forth on whether clays and mined minerals should be considered neutral like salt and water under the NOP. The current standard does not treat such mined minerals and clays as neutral: I believe because there is a fair amount of processing/washing of many clays and mined minerals that makes such a designation questionable. I tend to think we should just leave things as is, but wanted to note this.

*** 5.3 Allowed Processes and Ingredients**

.
.
.

Table 5.1

Add the term 'hydrolysis' between catalyzed and esterification in the third row. The proposed sentence should read: Mineral Acid-catalyzed *hydrolysis*, esterification or transesterification

.
.
.

See Annex E.2. for clarification of particular ecological agricultural-based botano-chemical processes. The reagents and catalysts allowed under NSF that individually or in various combinations enable the more intensive NSF-allowed processes to happen are:

Potassium/Sodium Hydroxide
Metal Catalysts (Nickel, Platinum, Palladium)
Copper Chromite
Zinc Oxide
Strong Mineral Acids (Sulfuric, Phosphoric, HCl)
Strong Hybrid ChlorSulfonic Acid
Methanol
Phosphorous Trichloride or Thionyl Chloride
Hydrogen
Sulfur/Sulfur Trioxide

5.3.1 Preservatives

.
.
.
The following row should be added to Table 5.2:
Salycylic Acid and its salts

The following language should be added to 5.3.1

Any other ingredient with anti-microbial activity may be used, insofar as it is made by approved processes allowed under this standard. See Annex G. (E.g. Glyceryl Caprate).

Proposed change for 5.3.2:

ALLOWED MINED & PROCESSED MINERALS

Chalk, Clays, Pumice, Titanium Dioxide, Zinc Oxide and any others specified in Annex G.

NOTE – A restriction of minimum 100 nanometers should be observed for nanoparticles.

NSF'S POSITIVE INGREDIENT LIST
The NSF Positive List mirrors the German natural BDIH standard Positive List, supplemented with the NOP list, since the BDIH standard has identical restrictions on allowed processes as NSF. The NSF Positive List is a clear comprehensive reference for certifiers and manufacturers to determine what is and is not allowed in NSF certified products. Any ingredient not on the Positive List that is made by an NSF allowed process can be petitioned to the NSF Joint Committee for placement on the Positive List. Should a notable safety or environmental issue arise for a given ingredient on the list, that ingredient may be de-listed under a sunset review. Organic forms of ingredients made by processes described in 5.3 shall be used when commercially available.

Hello All:

A big stumbling block for the development of the surfactants allowed under NSF from organic material, is the problem of scale in getting fatty alcohols produced from certified organic oils; fatty alcohols are the basic surfactant building block/sub-ingredient for various surfactants. Fatty alcohols are also utilized extensively in their own right, in lotions and hair conditioners allowed under the NSF standard. To make fatty alcohols, triglyceride oils are transesterified with methanol to make methyl esters, which then need to be hydrogenated at extremely high pressure to produce fatty alcohols. The operations

that do this are very capital-intensive huge-volume operations, and impossible to get a small dedicated batch run with certified organic oil exclusively within any reasonable cost/efficiency structure. I believe something like 300 MT minimum runs is what we were looking at, as we have an all-purpose cleaning product based on coco glucoside and SCS, and so have spent time looking into this.

Accoring to "Branded! How the Certification Revolution is Transforming Global Corporations" the FSC implemented a change to the straight % FSC claim that, one, allowed a "volume-credit" as I outlined below to happen, while two, implementing tighter controls on the non-certified content (no GMO, no old growth, no illegal harvested wood, no "social turmoil"/trampling of worker/indigenous rights). This was to respond to the fact that Sweden had the largest proportion of FSC certified forest, but Swedish processors were not bothering to certify much actual output product.

Page 89-90: "The volume-credit system allowed companies to place an FSC logo on products coming out of a mill in direct proportion to the FSC-certified inputs going into the mill over a defined period of time. For example, if the mill could show that 50 percent of the pine or fir it purchased for making the windows during a given month or quarter came from FSC-certified forests, it could place the FSC logo on 50 percent of the windows produced with that wood during that period.

"From the point of view of some FSC stakeholders, this change came with a high psychological cost. If you purchased a window with the FSC logo on it, you could no longer be absolutely certain that the wood in that window actually came from trees harvested from an FSC-certified forest. You could, however, be confident that by purchasing that window you were providing direct support to the improvement of forest management worldwide. It required trust in the system. To bolster that trust, environmental advocacy groups agreed to the introduction of the volume-credit system only if a system for improving the control of uncertified wood was strengthened….

"The volume-credit system proved to be useful in unexpected places. Representatives of the social chamber argued, at the 2005 general assembly, that small-scale indigenous and community based certified forests were finding it easier to convince local mills to become CoC (Chain of Custody) certified because the standards no longer required that they implement costly physical segregation for small batches of certified timber."

(Me aain) In a similar vein, buying "green energy" off the grid doesn't deliver any dedicated green energy different from the brown energy everyone else gets off the grid. You still get the same brown energy, but your funds are allocated to and enable scale-up of green energy sources that are feeding energy into the overall grid.

I'd like to propose under NSF that for fatty alcohols made from certified organic oils, and potentially steam-splitting organic oils to make glycerin and fatty acids too (the other main basic sub-ingredients for NSF processes) which also has similar scale issues, that on a temporary basis that sunsets after enough market volume is reached, that the NSF standard enable certification of a fatty alcohol output volume (and potentially fatty acids

and glycerin) proportional to the certified organic oil input that's diluted into a larger conventional oil input volume. So for instance, if 50 MT certified organic coconut oil is mixed with 250 MT of conventional coconut oil feeding into a fatty alcohol operation, than 50 MT of the resulting fatty alcohols and glycerin would be certified under NSF as "Coco Alcohol/Glycerin made with Organic Coconut Oil", even though the actual certified fatty alcohol would be diluted per the input organic/conventional oil ratio of the overall run. The certified Coco Alcohol could then be sulfated, or combined with organic glucose in a glucosidation reaction, to produce "Sodium Coco Sulfate / Coco Glucoside made with Organic Coconut Oil".

I think this is the advantage of the "made with Organic" nature of the NSF standard, that we can build in this kind of flexibility. A straight "Organic" product designation would require the high-bar NOP standard of complete authenticated/certified purity, free of any commingling of conventional material. But under the NSF "made with" standard, I think we can be flexible here, and address the fundamental chicken/egg problem of getting certified fatty alcohol, fatty acid and glycerin produced efficiently from certified organic material. This accords with the realities that FSC and green energy schemes have to deal with as well. And this allowance would hopefully be sunsetted after a couple years under a sunset review, that will determine whether market volumes are able to justify dedicated certified runs at the scale fatty alcohol/acid/glycerin manufacturers work at.

This isn't without controversy but is similar to green energy purchasing, and USDA certifiers can easily certify that the certified output volumes correspond to certified organic input volumes. (USDA certifiers generally certify the much more strict total segregation of organic versus conventional in production).

Depending on the scale of the actual downstream sulfation and glucosidation operations of major players like Cognis, that make alkyl glucoside surfactants (eg. Decyl glucoside, coco glucoside, etc.), we might want to implement a similar scheme for them as for the fatty alcohol/acid/glycerin producers.

To the issue that organic consumers associate "organic" products and ingredients with a higher degree of health and safety, this isn't really an issue with the more intense NSF-allowed "made with Organic" processes we're talking about. The degree of processing and use of intermediate reagents like methanol that is fossil-fuel-based/non-renewable/toxic, makes the "health" of actual organic versus conventional feedstock pretty moot in the case of fatty alcohols. Ie Whatever trace pesticide residuals are present and of concern in the source material, is swamped by the processing intensity and synthetic inputs of the process itself. Also "made with Organic" products generally use conventional ag material anyway in the non-organic allowance. The progressive consumer interest here is more focused on promoting the organic health/sustainability/ecology of the agricultural practices and farms that provide the feedstock for core processed ingredients in NSF "made with Organic" certified products.

The USDA NOP "organic" category of personal care provides consumers with the ideal of comprehensive pure pesticide-residue-free organic ingredients with limited processing.

Best, David Bronner

Proposal 3:

In a relevant part of Section 5.3, insert a statement something like:

"For production of fatty alcohols, fatty acids and glycerin from certified organic material, the basic sub-ingredients for esters and surfactants as well as extenviely used in personal care in their own right, in recognition of the prohibitive scale of a dedicated certifeid organic feedstock run for producers that run extremely large batch or continuous operations, a "volume-credit" systme will apply.

This means that if 50 MT of certified organic coconut oil is fed into an operation along with 250 MT conventional, that 50 MT of fatty alcohols and glycerin output may be certified under NSF as "made with Organic Coconut Oil" with an organic content of 98% as specified in 5.3 (versus 300 MT of fatty alcohols certified to have less than 20% organic content which won't work for downstream NSF manufacturers).

Oh, Oh Organic, Inc

1 – 5.3.2 – I have, as a distributor of “organic and organic compliant” cosmetic materials been unable to find a clay that is not irradiated.

2 – Table 5.2 - “Natural Source” is used to describe preservatives, however it is not defined. What is “natural sourced”?

Annex E

Access Business Group

Within Annex E which is provided as "informative", there are judgements for each of the reference chemical processes under E.2. These judgements exceed the bounds of the standard as following the NOP guidance. Additional notes are provided which are interpretive and do not cite an official source, for example "SLS is controversial". Also there is uneven use of reference bodies. EWG is cited when that organization is providing an interpretation of ingredient safety and is not subject in there report to external review. BDIH is cited when that is the collective judgement of an industry association. Ecocert is cited and is representative of a certifying organization which does endeavor to qualify under the certifying organization criteria in appendix 3. this uneven citing of organizations without noting qualification is unacceptable and there should be a standard of acceptance if any such interpretive judgement is to be presented. Within the scope of the standard as presented, I propose that any such information be limited to NOP recognition.

ABITEC Corporation

Comment:

The reaction temperature listed in the reaction conditions section should be increased to 250°C maximum. Typically in the industry, noncatalyzed esterifications of glycerin and fatty acids for food and cosmetic use are run at that temperature in order to reduce the AV (Acid Value) to less than 0.1. They are also more typically run under vacuum, not pressure, as is stated in the same section.

Proposal:

The reaction temperature should be 250°C maximum and the pressure can be a vacuum of less than 1 mm Hg up to 60 psig.

Annex G

Cognis

First, under the "made with organic" classification outlined in table G.2, we propose that Decyl Glucoside and Lauryl Glucoside be added to the "ingredients temporarily permitted in conventional form" category so that they are in line with the classification of Coco-Glucoside. The rationale being that these products derive from the same approved Glucosidation process outlined in Table 5.1 of the Standard and represent surfactants made from natural-renewable raw materials. Once sufficient 100% organic feedstocks to produce the glucosides are available, the products would then be moved to the "Ingredients available in organic form" list.

Proposal

Add Decyl Glucoside and Lauryl Glucoside to the "ingredients temporarily permitted in conventional form" category

Na True

Modified raw materials, which are not yet available in organic quality, should be regulated as a positive list (compare *Table G.2*) and considered as neutral.

Annex G
The selection of raw materials in the appendices (particularly in appendix G2) is, in some cases, not comprehensible. Why should the use of a raw material such as "decyl glycoside" not be permissible unless it is available in organic quality, while this restriction does not apply to a great many comparable raw materials?

Regulation of the raw materials allowed via a positive list, as described in the commentary on 3.4., would offer a great deal more transparency to consumers.

Finnfeeds Finland (Part of Danisco)

We have recently noticed that betaine is on the list of prohibited ingredient types in the NSF Standard for Organic Personal Care Products.

Our understanding is that this is a mistake and we would like to introduce our product Betafin BP and Natural Extract AP more in detail. Our product is very often mixed with the synthetic type of surfactant betaines, alkya amido betaine etc. The INCI name of our product is betaine

Our product trade names are Betafin BP 20 and Natural Extract AP. They are both trimethylglycine, that is betaine, in crystalline form in anhydrous and in monohydrate forms, respectively. The chemical formula of our product is C5H11NO2, monohydrate form contains also one H2O molecule attached. The CAS numbers of our products are 107-43-7 and 590-47-6.
This betaine occurs in many plants and animals even in humans. We separate it from Sugar Beet molasses. The process is essentially simple. The molasses is extracted from sugar beet with water, then it is chromatographicly separated using water as eluent and then it is crystallised. There is no chemical reactions involved nor there is any solvents used in this process. The raw materail comes from nature.
Infact, many of our clients have Ecocert for their products containing betaine.

We hope this infomation will help to explain this confusion.

If you have any additional questions please contact me or our Business manager Kirsti Jutila (kirsti.jutila@danisco.com, tel. +358104314336)

Proposal:

We would like to propose a solution that the natural product with INCI name Betaine wouldn't be on the list of prohibited common ingredient types.

TerrEssentials

G.2 -- There should be NO synthetic ingredients temporarily permitted in conventional form!

Dr. Bronner’s Magic Soap

ANNEX G
NSF POSITIVE INGREDIENT LIST

The NSF Positive List mirrors the German natural BDIH standard Positive List, supplemented with the USDA NOP list, since the BDIH standard has identical

restrictions on allowed processes as NSF. The NSF Positive List is a clear comprehensive reference for certifiers and manufacturers to determine what is and is not allowed in NSF certified products. Any ingredient not on the Positive List that is made by an NSF allowed process can be petitioned to the NSF Joint Committee for placement on the Positive List. Should a notable safety or environmental issue arise for a given ingredient on the list, that ingredient may be de-listed under a sunset review. Organic forms of ingredients made by processes described in 5.3 shall be used when commercially available.

Oh, Oh Organic, Inc

Annex G – Organic glycerin is now available.

Annex G – Org. maltodextrin is available.

Annex G –2 – why is tocopherol acetate allowed? There is non-gmo mixed tocopherol that fill the need of a effective anti- oxidant for personal care products.