Appendix D

Animal Bedding

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PO Box 756
Conrad, IA 50621 USA

Gregg Sharp
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641-366-2001
FAX 641-366-2366
gregg@greenproducts.com

January 23, 2010

Lisa Warfield
Weights & Measures, Coordinator
NIST, Weights & Measures Division
100 Bureau Drive
Gaithersburg, MD 20899-2600

Dear Ms. Warfield:

Re: Proposed Amendment for Handbook 130, Method of Sale, Section 2.23 – Animal Bedding

Green Products Company is a processor of corncobs that are used as a bedding material for the laboratory animal research industry. We fully support adopting the amendment which would allow us to continue selling on the basis of weight.

All of the end-users identified in the amendment clearly fall under the definition of "Non-consumer" as defined in HB 130, Packaging & Labeling Regulations, Section 2.3 on page 60 and so there is no grey area regarding to whom the amendment is applicable. Additionally, all laboratory animal research entities are subject to stringent standards and monitoring by industry accrediting agencies and that further delineates the market.

The industry's practice of buying corncob bedding on the basis of weight stretches over several decades. Those who buy and specify lab animal bedding products are well educated and sophisticated. Of the few processors and marketers of corncob bedding, only one processor packages by volume and that is a relatively recent change from their past practice.

The absorptive capacity is the most important physical characteristic used to evaluate lab beddings. Bulk density is a measure of weight for a given volume and usually expressed in terms of pounds per cubic foot. Corncob bedding with a heavier bulk density will always absorb more than lighter density bedding. As a processor of corncobs, we purchase all of our raw materials on the basis of weight. When selling by volume, there is great economic incentive for the processor to process lighter density raw materials because it takes less weight to fill the given volume, yet it is the heavier density raw materials that have greater absorptive capacity, and that is what the end-user wants.

Checking the net contents of packaged goods is relatively easy for small units whether packaged by weight or volume. However, the industry trend is to utilize 1,000 lb. bulk bags. It would be possible to weigh a bulk bag, but it is difficult to imagine a practical method for checking the net contents of a bulk bag containing 35 – 40 cubic feet of corncob bedding.

Because of that, the bulk bag portion of the industry will simply be unregulated because there is no way for a curious end-user to check the contents.

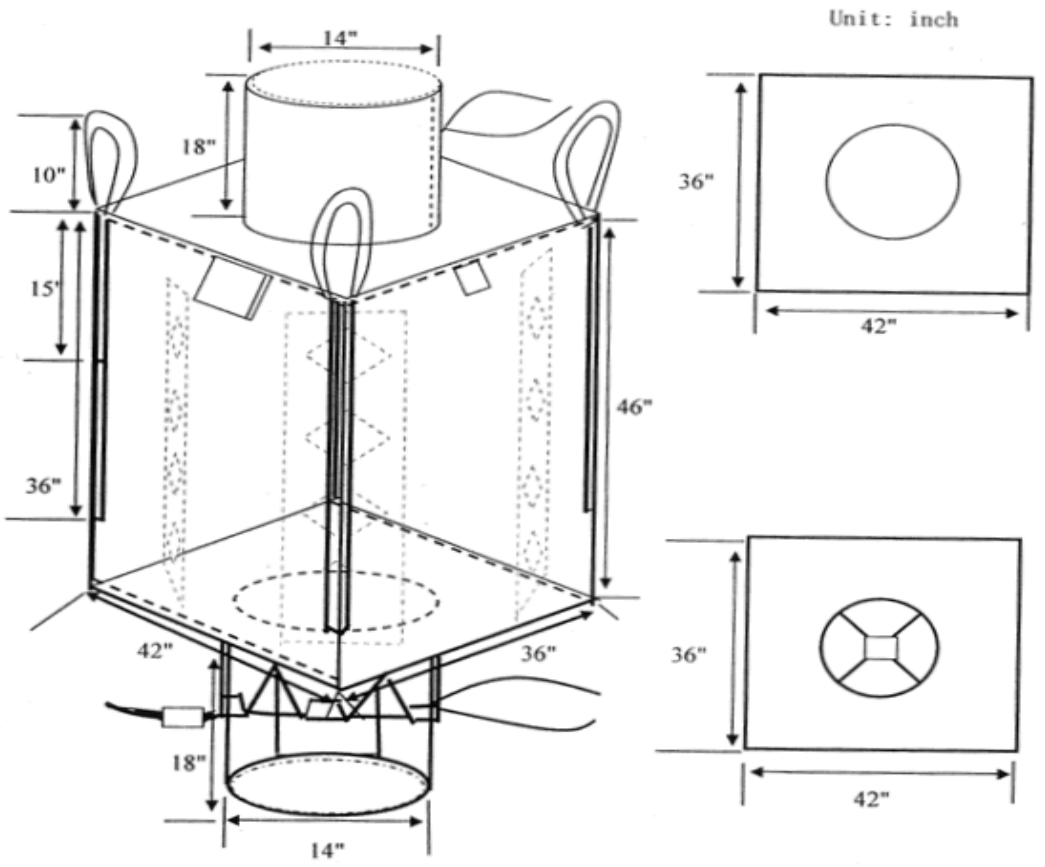
When listening to those who would like to influence the committee's decision, you should consider whether the individual or entity is a processor/manufacturer, a distributor, or end-user of the bedding. A processor will benefit from volumetric method of sale by packaging lighter density material which is less absorbent and that is to the detriment of the end-user. Although Green Products Company is a processor, we support Harlan Laboratories. Harlan is successful in the lab industry, not because they are loyal to their supplier, but because they are fully committed to serving the needs and best interests of their customers. It is the end-user who benefits from weight as the method of sale.

Sincerely,

Gregg Sharp
Sales Manager
Green Products Company

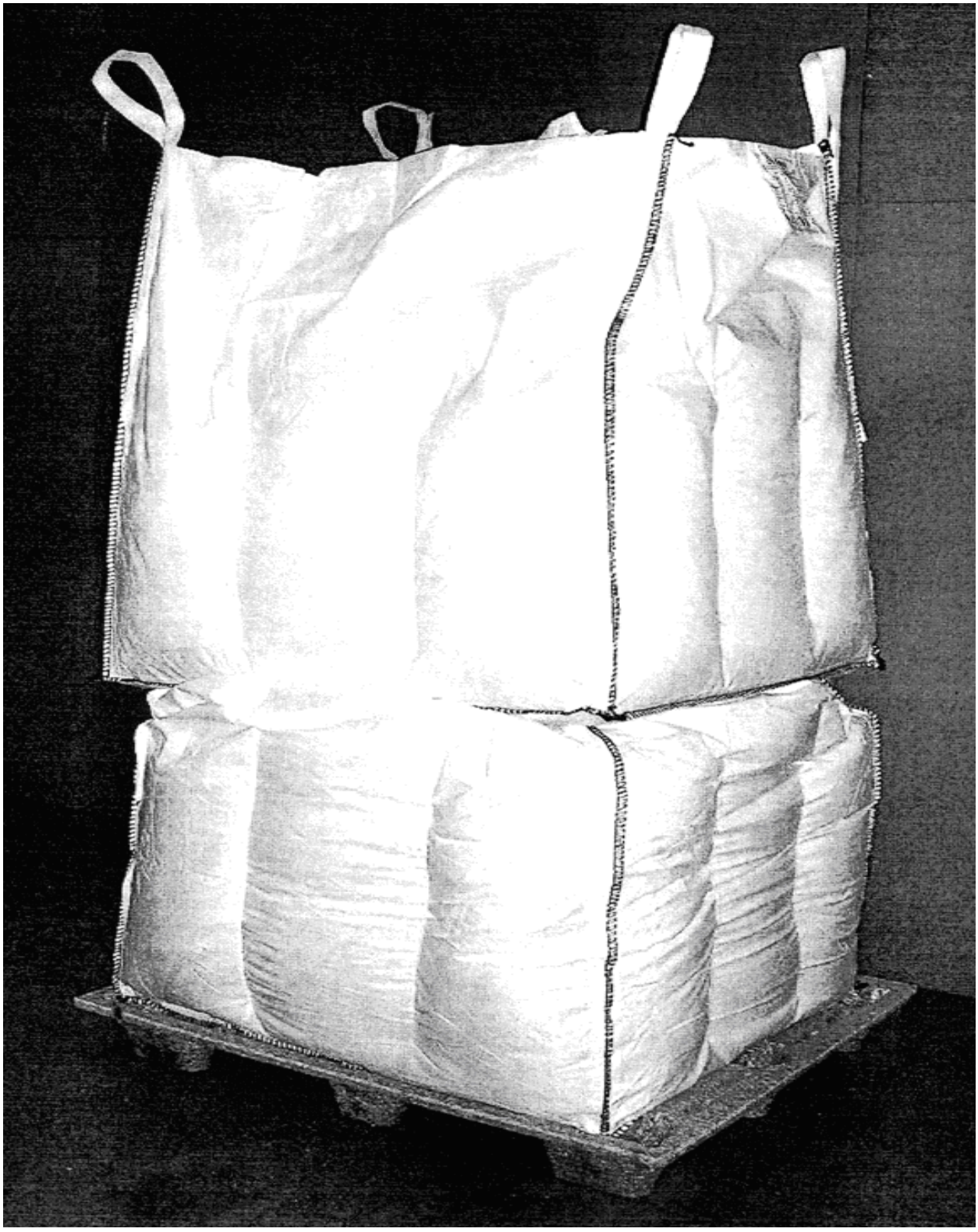
PS Line drawings of bulk bags and photos are included with this.

Model: IGP-46 (36"x42"x46") 4-Panel Baffle Design



Description

Size	36" x 42" x 46"	**Printing**	No
SWL, SF	2000 lbs 5:1	**Document Pouch**	1 - 12x12 Ziplock
PP Fabric	6.0 oz. Coated, White	**PE Liner**	No
Top	14"D x 18"L, ½" Tie Spout	**Sift-Proof**	No
Bottom	14"D x 18"L, ½" Tie Spout; Star Closure, Rope Tube		
Lifting Loop	Vertically Sewn Lifting Loops Height: 10", Sewing down: 15" & 36"		



harlan™ Helping you do research better

Harlan Laboratories

Bedding Packaging for Research Applications

All Animal Bedding Materials Are Not Created Equally

TERRY BURNS-HEFFNER
Teklad National Sales Manager
May 4, 2009

harlan™ Helping you do research better

Bedding Materials for the Biomedical Research Community

All products sold directly to commercial end-users, on an international basis.

Harlan Laboratories

The Market

The International Biomedical Research Community

Customers such as:

- Government Institutions (NIH, NCI, FDA, USDA, DOD)
- Pharmaceutical Firms (Merck, Pfizer, Schering, Wyeth)
- Contract Toxicology Labs (Covance, Battelle, Wil Research)
- Medical Schools (Johns Hopkins, Harvard, Wash U.)
- Biotech Firms (Amgen, MedImmune, Genentech)
- Large Commercial Breeders (Harlan, Charles River, Jackson)

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THE MARKET: Part 2

THE CUSTOMERS IN THIS SEGMENT ARE:

> **LARGE USERS** Most often buying full pallets
Some by in Bulk, Some buy full trucks
Mechanized Materials Handling
Some use robotics technology

> **VERY DEMANDING** Rigid Specs for Product Quality

> **HIGHLY REGULATED** NIH, USDA, AAALAC, GLP's

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Harlan, as a part of this Industry

1. is a Manufacturer of both Diets and some Beddings (***not*** cobs)
2. sells manufactured items (diets & some beddings) and re-sells other manufacturer's bedding items direct to commercial end users
3. is also one of the largest Commercial End Users
4. sells, re-sells and purchases on an International basis
5. products are ***not*** sold in retail stores

Therefore, we come to you with both a manufacturer as well as a customer/end user perspective .

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"All Bedding Materials are not created equally"

Wide Variety of Materials & Characteristics

- ***Wood Chips*** ***(cubes of wood from saw cuts)***
- ***Corncobs*** ***(granular, 1/4" or 1/8" particles)***
- ***Paper*** ***(Loose Pulp)***
- ***Paper "chips"*** ***(diced, rigid squares of alpha cellulose)***
- ***Paper Pellets***
- ***Cob Pellets***
- ***Wood Pellets***
- ***Wood Shavings*** ***(not commonly used in research – variables)***

(NOTE: The vast majority of these items are still packaged & sold by weight)

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CHARACTERISTICS:

- VERY DRY: (typically 6 to 10% moisture or less)
  - Maximize Absorbency
  - Minimize Mold/Contaminants
  - NIH Specifications
  - Regulated & Controlled Indoor Storage Requirements

    (USDA, NIH Guidebook, AAALAC, FDA GLP's)

  MOISTURE: Is a bad thing, and not tolerated. *Low* Moisture is critical for proper product performance, and to meet client specifications & expectations

  (This is not mulch, peat moss or top soil)

  * Some materials are compressible, but most are not

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The Issue

In meetings with NIST leaders, it was discovered that the spirit and intent of the current statute was to control packaging of materials such as mulch, peat moss & top soil. These materials, when packed by weight, can vary widely in terms of weight. Significant moisture loss can occur during shipment & storage. Such products can also be "spiked" with moisture to increase weight.

Animal Bedding is not plant bedding or soil, and as demonstrated earlier, in this particular market segment, moisture is an undesirable characteristic that is very tightly controlled and regulated. Most beddings used by clients in this segment are also not compressible, due mainly to the need for "flowability" in high-throughput facilities.

Further, for most bedding materials, raw materials & other input costs are purchased and calculated in terms of weight, freight is calculated in terms of weight, and so selling price is determined using weight. For value comparison purposes, clients either request or require pricing on bids & contracts in terms of weight.

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NIH SPECIFICATIONS

(NIH Spec: NIH-13-119)

3.2 Processing: …. When delivered, the bedding shall contain at least 8% but not more than 10% moisture…

3.3 Form: Specifications on particle distribution and dust content or fines. (US Standard Sieve Tests/specs are also given here)

5.1 Packaging: Bedding shall be packaged in 40 Lb. (+/- 1 lb.) bags

The NIH Bid specifications also require that all bedding items be bid by weight, in terms of pounds, to allow for proper value comparison

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Accuracy in Filling Bags

(NON-Compressible Materials)

By Weight

- Precise
- Alarmed/controlled
- Easily Verifiable (both by manufacturer and client)
- Complies with NIH Bid Specifications
- Preferred by most clients in large bids/Industry Standard

By Volume

- Estimated by flow rates for filling bulk totes (or weight?)
- Less precise than weight, involves estimations
- Not as readily verifiable (especially larger packages)
- Does not comply with NIH bid requirements and strays from Industry Standards

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FACTORS IN DETERMINING HOW MUCH BEDDING MATERIAL TO PUT INTO A CAGE (*"Enough")*

First thing that must be done, per application, is determine the proper amount of material, by weight, to put into a cage. Absorbency is calculated in terms of a % of weight (Example: "Absorbs 130% of its weight in liquids")

Determined by:

> Type of Caging: IVC, Static, Enclosed Isolator, Other

> Species & Population of Cage

> Temp., Humidity & Air Changes: At cage level & at room level

> Desired Interval Between Cage Changes

> Weight, or "Amount of Absorbent Material", is the final determining factor, *not Volume (Rice Krispies vs. Grape Nuts)*

These and other factors will often be different within a given facility

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BULK TOTES: A Customer's Perspective

When is this full?

How would I verify?

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Accurate Weight is Required for Shipping

Domestic Haulers

- An accurate weight per truckload or container must be calculated for every shipment, truck or rail
- Packing by weight makes calculations easy for the shipper, and is easily verified by the hauler

Overseas Containers

- Same hold true for overseas containers, and clients prefer packaging by weight, which allows for more rapid/accurate verification
- Carriers must have the weight on Bill of Lading to comply with maximum weight laws

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Similar Materials Sold by Weight

Wood Pellets for Wood Stoves are sold by the pound (40 & 50 pound bags) and/or by the Ton

Stone & Gravel sold by weight, either by the bag or by the ton

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Summary:

- Most bedding materials used in this industry are not compressible, and have therefore historically been packaged & sold by weight
- Moisture loss during storage, and risk of moisture "spiking" are not issues due to the low starting moisture
- Low moisture is vital to proper product performance, and is also tightly controlled & regulated by both the NIH, the USDA, and through bid specifications of many other larger end users
- Research Standards require strict and controlled indoor storage conditions to maintain the integrity of bedding products prior to use
- Packing by weight is more precise and much more easily verifiable, both by the manufacturer, and by the customer
- Packing by weight is specified by most government bids, and is preferred by most Purchasing Agents for ease & accuracy of value comparison

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Summary (continued)

- In terms of shipping, weight, not volume is required for calculating accurate weights for billing of freight (which is traditionally billed "per ton"), and in meeting legal truck and highway federal weight requirements. Weight is also required on all Bills of Lading
- For a Manufacturer: Verification by volume is less precise and more difficult when it comes to larger packages (such as bulk totes)
- For an End User: Verification by volume is not as easy for smaller packages, and nearly impossible (and labor-intensive) on larger packages that hold from 500 to 1000 lbs. of material
- There are non-consumer provisions for many other commodities regulated by the NIST and Weights & Measures Divisions. Non-compressible bedding materials for the biomedical research community (which is clearly non-retail) should be covered by one of these non-consumer provisions.

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Thank You!

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SHEPHERD | SPECIALTY PAPERS

Date: January 22, 2010

To: Don Onwiler,
Executive Director
National Institute of Standards and Technology

First let me introduce myself, I am Michael Schoonover, Vice President of Shepherd Specialty Papers. I am a Civil Engineer by degree, and have 30 years experience working in the paper business.

Shepherd Specialty Papers (SSP) is a distributor and manufacture of primarily paper products used mostly in the animal research industry. We also purchase, sell and distribute a full line of animal bedding products including Cobs. SSP is a leader in a number of these products and has been in this business since 1980. For more information on SSP visit www.ssponline.com .

We not only agree with the proposed changes to section 2.23 in HB130, but feel they are a requirement if this stature applies to the animal research industry.

Our primary product is a Paper Pulp Chip, a small square of pure pulp fibers, which the research industry uses as contact bedding. We manufacture this same product for sale into other markets including the construction and food industries, and in all cases we sell by weight. This is the measurement that most directly relates to the effective use of the product, the amount of fiber included. In the research industry, this dictates moisture absorption and consistency. There is really no consistent or fair way to package or sell this product by volume.

SSP also purchases and sells a full line of alternative animal bedding materials, the majority of which are sold to us and we in turn sell by weight. This has been the accepted standard in this industry and is the basis of most government, industry, and public bids that are issued. For each different product, specific guidelines are included to address moisture, packaging, particle sizing and distribution and other things that standardize the weight among suppliers and laboratories. It is these specifications that determine or clarify whether weight, volume or piece is the selling method. A key aspect of this sales arrangement is verification and repeatability. For our Paper Pulp Chip this is clearly weight, for other products weight is a key component in this industry as it normally correlates to the product's absorption capability.

We have reviewed the Harlan presentation materials presented in May 2009 and agree with and can confirm all arguments presented for this change. SSP believes that our Paper Pulp Dice product has even stronger arguments, which we can present if the committee desires.

In summary, section 2.3 applied to bedding used in the animal research industry needs to be updated to include the option of selling by weight as proposed in the amendment before this committee.

Thank you for your time and consideration,

Michael Schoonover
Vice President Operations

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E info@nep-co.com W www.nep-co.com

NEPCO®
Celebrating Over 50 Years of Excellence
Established 1955

June 29, 2010

New York Dept. of Agriculture and Markets
Attn: Ross Andersen
10B Airline Drive
Albany, NY 12235
ross.andersen@agmkt.state.ny.us

Dear Mr. Andersen:

Re: Proposed Revision to Handbook 130, Method of Sale, Section 2.23 – Animal Bedding

NEPCO is and has been a manufacturer of Laboratory Animal Bedding for over 40 years supplying wood chip beddings to the industry. We have been advised that the NIST L&R committee has been considering a revision as referenced above and wish to express our concerns as we are not in agreement with the proposed changes. As a granular, non-compressable material, our wood chip beddings would be affected and for the following reasons we feel that the proposal is not in the best interest of the end users.

1. There is a significant difference in the density of different species of wood and therefore a variance in the density of the wood chip beddings. Two of the most commonly used and preferred species are Hard Maple and Aspen with respective densities of 44.2 and 27.0 lb/cu ft. A bag that is filled volumetrically to identical levels of wood chips from these species will have a proportional weight difference but since the product is used volumetrically each bag will fill the same number of animal cages.

2. The absorptive capacity of the wood varies according to its porosity of and does not necessarily correlate to wood density. In fact, White Pine with a density of 26.3 lb/cu ft has the capacity to absorb more liquid than Hard Maple at its density of 44.2 lb/cu ft. The softer fibers of pine more readily absorb the liquid and the larger interstitial spaces provide more volume in which the liquid can be retained.

3. The verification of package size for volumetrically filled bags is regularly observed in the practice of filling cages since most bedding dispensers are volumetric in design. The end user will note under-filled packages if the number of fillings from a bag decreases. Similarly, when palletized and received by the end user, volumetrically filled bags will result in uniform pallet heights. For packages of varying densities filled by weight, the pallet height can vary dramatically, necessitating check weighing by the end user to assure compliance with the weight standard.

In summary, we feel that the method of sale currently used for wood chip, corn cob and like beddings is best and that a change to a weight standard will make it less certain for an end user to determine whether they are receiving fair value for their purchase. The L&R Committee 2010 Interim Report makes reference to "industry support" for the change; for the record, NEPCO is clearly not in consensus with this recommendation.

Sincerely,

Gary Schiavi
President

Jason Raynor
Lab Supply
General Manager
Phone: 1-800-262-5258 Fax: 817-492-9300
Lab Supply

Jason Raynor
Lab Supply
General Manager
Phone: 1-800-262-5258 Fax: 817-492-9300
Lab Supply

From: Norm_Peiffer@AndersonsInc.Com [mailto:Norm_Feiffer©AndersonsInc.Com] Sent: Wednesday, June 30, 2010 7:56 AM
To: undisclosed-recipients:
Cc: Ted_Weaver@AndersonsInc.com; Jerry_Reynolds©AndersonsInc.COM; Dale Theis©Andersonsinc.Com; Andrea_Gay@andersonsinc.com; Colleen_Kander©andersonsinc.com; Barb_Sample@AndersonsInc.com
Subject: Letter template for Weight & Measures HB 130

Here is a letter we drafted for your consideration to use when writing to your state W & M representative. Fell free to use as is (after adding your letterhead) or parts and pieces.

We'll get you the outcome as soon as we have it.

Thanks again

Ted Weaver (almost retired)
Andrea Gay
Colleen Kander Jerry Reynolds Norman Peiffer

Dear Mr. Benavides,

Re: Proposed Revision to Handbook 130, Method of Sale, Section 2.23 — Animal Bedding

As a member of the laboratory animal provisions and supplies industry, we do not support the proposed change that would allow selling of bedding used for laboratory animals to be sold by weight. Below are the specific reasons this proposed change is inappropriate for the laboratory bedding consumer or any end user. These reasons are counter to what is reported on Page L&R 18.

1. There is no incentive for manufactures to produce a lighter product. The product varies seasonally and cannot be consistently produced to the same density per cubic foot while maintaining the quality of product. Furthermore, the product absorbency is not decreased by making it lighter, it is INCREASED. This was verified in an independent study by C.C. Burns & G.J. Mason, Department of Zoology, University of Oxford, UK, Animal Sciences Department & University of Guelph, Ontario, Canada. Accepted May 12, 2004 the study entitled: "Absorbencies for six different rodent beddings: commercially advertised absorbencies are potentially misleading". The study conclusion is: "By volume, corncob was the most absorbent bedding...". Corncob had the highest absorbency per cm^3..."and "In contrast, reported absorbency values calculated per unit mass would give the misleading impression... Attached is a copy of the study for your reference.

2. Historically, NIH has purchased primarily wood bedding for their labs, a product that has always been sold by volume. All customers including pharmaceutical, university research sites and large commercial breeders including Harlan who have purchased wood bedding have bought it by volume. Currently, The Andersons is the largest supplier of corncob to the laboratory animal market, and has been supplying customers since 2006 in government, pharmaceutical, university research sites and contract labs with corncob sold by volume.

3. Moisture range is only part of the equation that determines the density of processed corncobs. All manufactures comply with the restrictions. Corncob genetic variation of the hybrid seed, seasonal changes in humidity, hammer mill processing, drying and final screening all contribute to the varying cubic density and thus mass of the finished product.

4. Verification of package contents is easy with volume. The packages are sized to hold the stated volume of the package. The pallets stack heights when filled by volume are all the same heights. A 1.25 cubic foot bag fill can be checked by poured into it into a 1.25 cubic foot box that can be purchased on-line. A simple box with inside dimensions of 12" x 12" x 15" filled to capacity will verify the fill. In the case of bulk sack the dimensions are printed on a tag providing the bag dimensions. Dividing the multiple of all the dimensions by 1728 will yield the volume in cubic feet. Scales vary in accuracy must be calibrated to ensure consistency.

Conclusions:
The sale of dry, granular or non-compressible pelleted bedding is best sold by volume. The cages used to hold the animals are filled by volume in the lab, not by weight. In labs where automatic bedding dispensers are used, they are calibrated to dispense by volume, not weight. The seasonal variance in bulk density inherent in these natural products varies the bag fill and thus cage fill of the bags when the bedding is sold by weight. The bag fill and thus the number of cages fill per bag do not vary when the product is sold by volume.

The industry does not support this change as noted in the final paragraph of page 18 of L & R letter. The Andersons, the largest corncob manufacturer and supplier, nor any of the other largest manufacturers of laboratory bedding industry members commented upon the proposed resolution.

Thanks,

Jason

From: Gaccione, John [jpg4@westchestergov.com]
Sent: Wednesday, June 30, 2010 3:28 PM
To: Warfield, Lisa
Subject: FW: Proposed Revision to Handbook 130, Method of Sale, Section 2.23 - Animal Bedding

More for you.

John P. Gaccione
Acting Director of Consumer Protection
Director of Weights and Measures
Westchester County Consumer Protection
(914)995-2164

From: Bill Clarke [mailto:Bill@animalspecialties.biz]
Sent: Wednesday, June 30, 2010 1:52 PM
To: Gaccione, John
Subject: Proposed Revision to Handbook 130, Method of Sale, Section 2.23 - Animal Bedding

Dear Committee Members,

As a member of the feed industry in Pennsylvania specializing in laboratory animal diets and beddings, we do not support the proposed change that would allow the selling of bedding used for laboratory animals to be sold by weight. Below are the specific reasons this proposed change is inappropriate for the laboratory bedding consumer or any end user. These reasons are counter to what is reported on Page L&R 18.

1. There is no incentive for manufactures to produce a lighter product. The product varies seasonally and cannot be consistently produced to the same density per cubic foot while maintaining the quality of product. Furthermore, the product absorbency is not decreased by making it lighter, it is INCREASED. This was verified in an independent study by C.C. Burns & G.J. Mason, Department of Zoology, University of Oxford, UK, Animal Sciences Department & University of Guelph, Ontario, Canada. Accepted May 12, 2004 the study entitled: "Absorbencies for six different rodent beddings: commercially advertised absorbencies are potentially misleading". The study conclusion is: "By volume, corncob was the most absorbent bedding…". Corncob had the highest absorbency per cm^3…"and "In contrast, reported absorbency values calculated per unit mass would give the misleading impression…"

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laboratory animal market, and has been supplying customers since 2006 in government, pharmaceutical, university research sites and contract labs with corncob sold by volume.

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The industry does not support this change as noted in the final paragraph of page 18 of L & R letter. The Andersons, the largest corncob manufacturer and supplier, nor any of the other largest manufacturers of laboratory bedding have commented upon the proposed resolution.

Thank you for your consideration,

William Clarke
Animal Specialties and Provisions, LLC
www.animalspecialties.biz
215-804-0144 Ext. 13

From: Bill Clarke [Bill@animalspecialties.biz]
Sent: Monday, August 09, 2010 2:22 PM
To: Warfield, Lisa
Subject: Lab Animal Bedding

Dear Ms. Warfield,
I had sent a previous letter against the provision or change regarding lab animal bedding being sold by weight instead of volume. We have sold corn cob bedding, wood beddings and paper bedding materials with some items packaged by volume AND some packaged by weight. I misunderstood the change was to cause all bedding to be sold by weight instead of volume. I could support the change (Handbook #130, Section 2.23 Paragraph 1) as worded specifically for ALPHA-dri or similar products (chipped paper products) manufactured by Shepherd Specialty Papers.

Thank you,

William Clarke
W. Edwards Deming Animal Specialties and Provisions, LLC
www.animalspecialties.biz
215-804-0144 Ext 13

"It is not necessary to change. Survival is not mandatory."
W. Edward Deming

Roe Bio-Medical Products
125 Wilbur Pl. Bohemia, NY 11716
www.roebiomed.com
(631) 236-9155 Fax (631) 289-4126

June 29, 2010

Michael Sikula
New York Bureau of Weights & Measures
Bldg 7A, State Campus
Albany, NY 12235

Re: NIST HB 130, Method of Sale, Section 2.23. Animal Bedding

Dear Sir,

I am a manufacturer of animal bedding material handling equipment, www.roebiomedical.com, including systems to handle and dispense all types of laboratory animal bedding. Included in our product line are both volumetric laboratory animal bedding dispensing systems and weight and volumetric bagging systems. I personally have 40+ years in the industry.

The method of sale for animal bedding should remain volumetric for NIST HB 130, Method of Sale, Section 2.23 Animal Bedding.

With few, if any, exceptions, all end users have employed and continue to employ volumetric methods for dispensing these bedding materials into cages, as the end users find there are considerable variables, confusion and difficulties in dispensing the animal bedding products by weight.

End users find that cost of volume supplied to volumes used are directly equitable number of cages, hence the cost per cages they process.

Volumetric sale of the animal bedding products eliminates environmentally influenced variables, such as moisture absorption or off gassing during storage or shipment, or post autoclaved (steam sterilized) moisture retention in these products. These environmental influences may significantly alter the animal bedding materials mass, making difficult to predict effective amounts of bedding product needed per cage.

Further, the harsh conditions in the cage wash processing areas where the bedding products are metered into the cages are NOT conducive to weighing methods without considerable cost to the end user. Ambient temperatures and relative humidity have great swings throughout the day in these cage processing facilities, making accurate instrumentation to dispense these products cost prohibitive.

In summary, NIST HB 130, Method of Sale, Section 2.23 Animal Bedding, should remain volumetric.

Thank you,

Philippe Roe
President
Roe Biomedical Products, LLC

AMERICAN WOOD FIBERS

Four Generations of Experience

July 9, 2010

TO: NCWM Laws and Regulations Committee:
FROM: Rich Whiting, VP Sales and Marketing, American Wood Fibers, Inc.

Dear Committee Members,
The purpose of this letter is twofold. First we wish to express our support for the proposed amendment to Handbook 130 being voted on at this conference allowing loose packages of animal bedding to be sold by weight.

The second is to enter into the record of this conference a concern which also has to do with package labeling of animal bedding. This is an issue which our company has raised several times in meetings of the NCWM, its regional affiliates, and various state agencies over the last several years. As the largest national supplier of wood fiber animal bedding to the continental U.S., American Wood Fibers takes the responsibility of package labeling adherence to current NCWM regulations very seriously. There is, however, widespread noncompliance in the market for large bales of compressed bedding sold predominantly to farm and home retailers, as evidenced by the 14 examples shown in the attached document. Essentially, we, and others who are in compliance, are confronting an unlevel playing field on which to compete.

The pertinent sections of Handbook130 are:

- Section 2.2, Method of Sale for animal bedding - "…If the commodity is sold in a compressed state, the quantity declaration shall include both the quantity in the compressed state, and the usable quantity that can be recovered."
- Section 6.14 Packaging and Labeling - Qualification of Declaration Prohibited: In no case shall any declaration of quantity be qualified by the addition of the words "when packed", "minimum", or "not less than" or any words of similar import (e.g. "approximately"), nor shall any unit of weight, measure or count be qualified by any term (such as "jumbo", "giant", "full" or the like) that tends to exaggerate the amount of the commodity.
- Packaging and Labeling 10.11 Statements of Cubic Measure in Compressed Form: When the content declaration on a commodity sold in compressed form is stated in terms of cubic measure, an additional statement may indicate the amount of material from which the final product was compressed. The amount in such statement shall not exceed the actual amount of material that can be recovered.
- Packaging and Labeling sections 8.1.1 and 8.2.2 regarding the font size and placement of the primary quantity declaration.

We are asking your support for greater attention to enforcement of compliance in the field. I have made contact with numerous state Weights and Measures officials to give specific examples of violations, and would be happy to supply further documentation by state, manufacturer or retailer upon request.

We appreciate your attention to this matter and look forward to remaining an active Industry participant in future NCWM conferences.

Rich Whiting
AMERICAN WOOD FIBERS
P-800-624-9663
rwhiting@awf.com

Corporate Office and Consumer Products
9841 Broken Land Parkway
Suite 302
Columbia, MD 21046
800-624-9663 / 410-290-8700
Fax 410-290-6660

Industrial and Wood Flour Products
100 Alderson St.
P.O. Box 468
Schofield, WI 54476-0468
800-642-5448 / 715-355-1900
Fax 715-355-5721

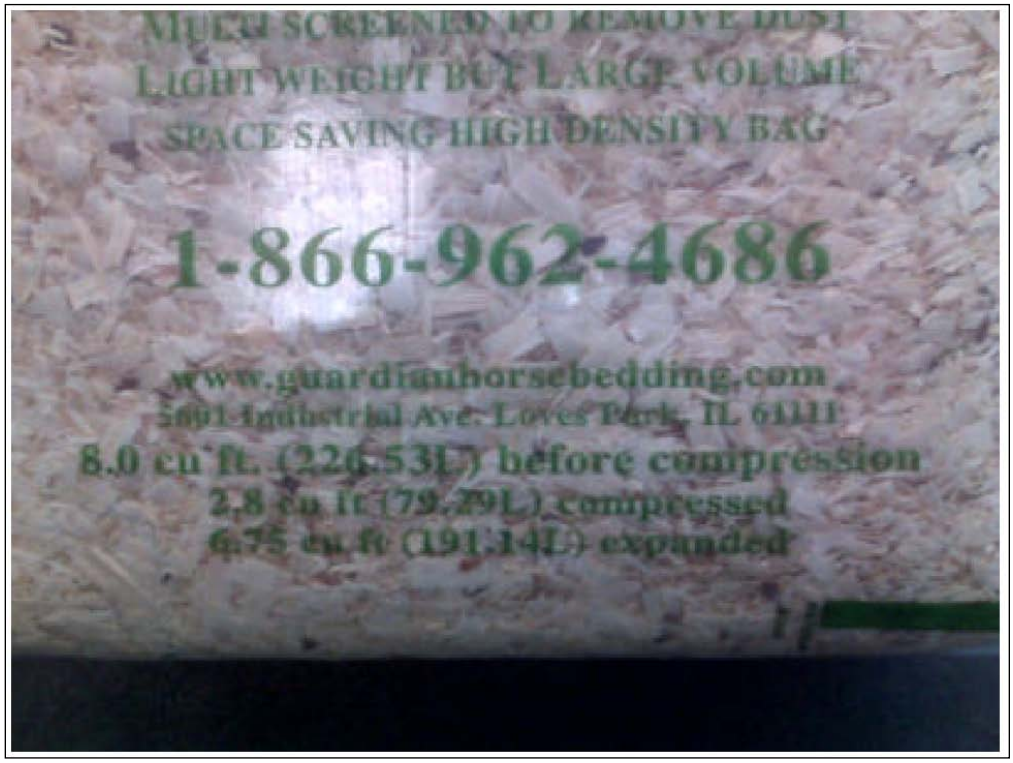
ISO 9002:1994
Certificate no. 09719

Visit us at: www.awf.com

TN Retailer – No expanded volume statement

WI Retailer – Qualification of declaration statement

MI, VA, TN, TX, KY, IL, NE and others – Pre-compression statement exceeds expanded volu
statement



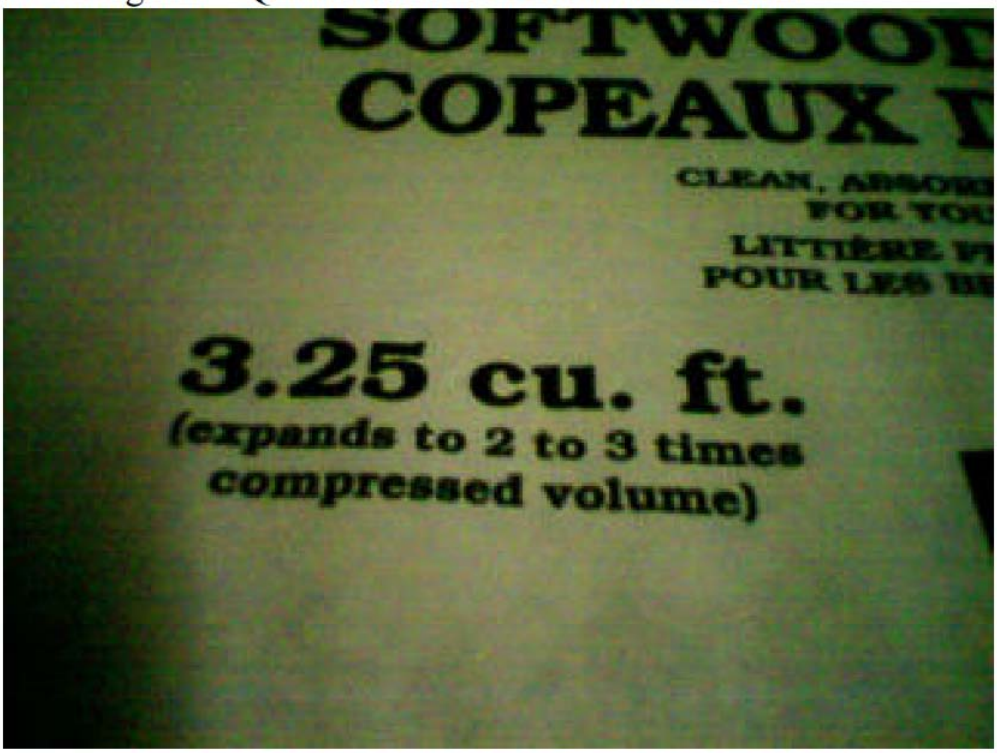
OH, PA, NY – Qualification of declaration statement

PA, NY, New England – No expanded volume statement

OH – no expanded volume statement

VA, MD – no expanded volume statement

New England – Qualification of declaration statement



TN – No volume statement, quantity declaration not proper height or placeme

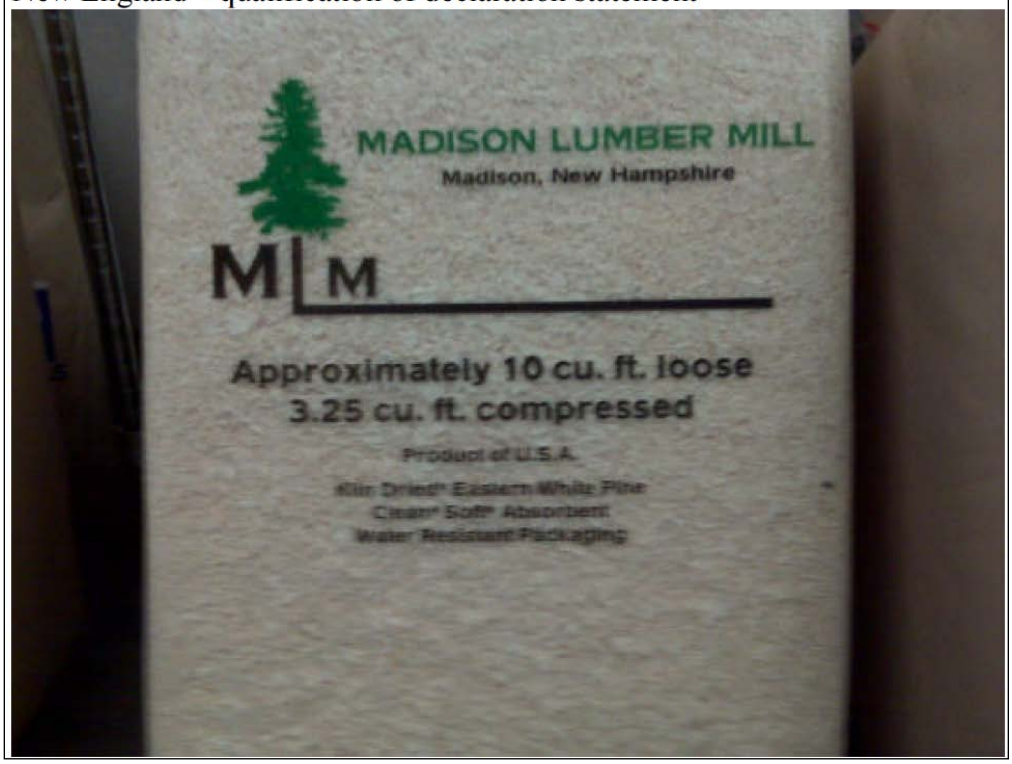
IN – volume statement on bottom of bag – states only "7.0 cu. ft. expanded"

NC, VA, MD , PA – no expanded volume statement

NJ, PA, NY – font size too small

PA – no expanded volume statement

New England – qualification of declaration statement



480 W. Dussel Drive, Maumee, OH 43537

Thursday, July 08, 2010

To: Laws and Regulations Committee
Re: Proposed Amendment to NIST HB 130, Method of Sale Section 2.23 Animal Bedding

Dear Committee Members,

I would like to categorically address the major claims made within the four numbered paragraphs of Page L & R 18. These four paragraphs appear to form the basis for the amendment request.

1. Selling by weight vs. volume:
Why did we start selling by volume? It was a California W & M "stop sale" citation to one of the companies referenced as an "industry supporters" (ref: last paragraph on Page L & R 18), for selling animal bedding by weight vs. volume to pet stores. We were directly informed by this company that we should change to volume to comply with the law. Today that same company wants the HB130 exception implemented. We complied seeing no difference between commercial end users and non commercial end users. Both user types use the bedding products to fill their animal cages in the same way --- volumetrically.

I do not know when the current regulation was first established, but the NIST had it right to regulate the sale by volume as opposed to weight. Volume packaging means the bag will always contain the same volume of product bag after bag after bag. Biomass products have a wide range of densities or weight per cubic foot and it is this density range which causes the bag fill content to vary. The higher the density the less the bag fill – the lower the density the fuller the bag.
Volume is the significant and consistent method of sale. Consumers use the product by volume whether in a pets cage or in a research laboratory cage.

Consumers, a.k.a., end users can always budget or know their bedding cost per cage fill is always the same bag after bag regardless of its weight since the bag always contains the same volume. Cost per fill becomes very important when research is paid on a per diem basis. The R & D expenses of the private pharmaceutical industry and the government based facilities become more closely monitored, correct budgeting has become more important.

2. Historically…..research sites have purchased bedding material on the basis of weight.
Weight was established in the late 1960's as the method of sale for corn cob bedding to the pet and lab research community because we knew no better. The Andersons were one of the first, if not first, to sell corn cob bedding into the research community and we sold by weight which became the benchmark. Many of our customers complained about the differing volume amounts in a bag, but 40 lb is 40 lbs whether it is a bag of feathers or a baggie of iron. And we continued to sell by weight and as new competitors entered the corn cob bedding market they followed suit.
It was not the purchasing departments who established the standard it was the early vendors.

3. Moisture as an industry standard
We could not agree more with the moisture level standard. Our published specifications are less than 10% but are typically within the 6 to 8% range.

4. Verification of package contents
Verification of volume only requires a simple box with an inside dimension of 12 x 12 x 15 to determine if the package fill is correct for our 1.25 cubic foot. Or in the case of a large bulk bag, the bag dimensions are on an attached printed tag which has been affixed by the bag manufacturer. Again using these dimensions to calculate the bag volume is a matter of simple math.
The Andersons provided many educational materials during the transition period from weight to volume including calculators which compare the number of bag fills at differing densities of a bag sold by weight. The calculator also generates a cost per fill by volume and shows that regardless of the density, the bag's volumetric content always yields the same number of fills regardless of the bag weight.
Unless a customer has access to a certified scale capable of handling the weight of a bulk bag (or for that matter weighing any size bag) there is no way to verify the weight as shown if in fact is correct. Volume is a mathematical equation and easily verified with the use of a calculator.

Bedding is used by volume not by weight. If the L& R committee would consult those "industry supporter" company web sites you will find Harlan sells some bedding products by volume and some by weight; while Shepherd Specialty Papers, sells by volume or by weight. Green Products supplies the corn cob bedding to Harlan by weight and to the pet industry the same product by volume. There is an interesting quote on the Shepherd web site; it is the comment that the Shepherd bedding dispensing system "…controls the exact amount of bedding per cage and replicating the volume across all cages in the facility. A small amount of variation in the amount of bedding used per can add up to thousands of dollars over the course of a year." **OUR POINT EXACTLY!!**

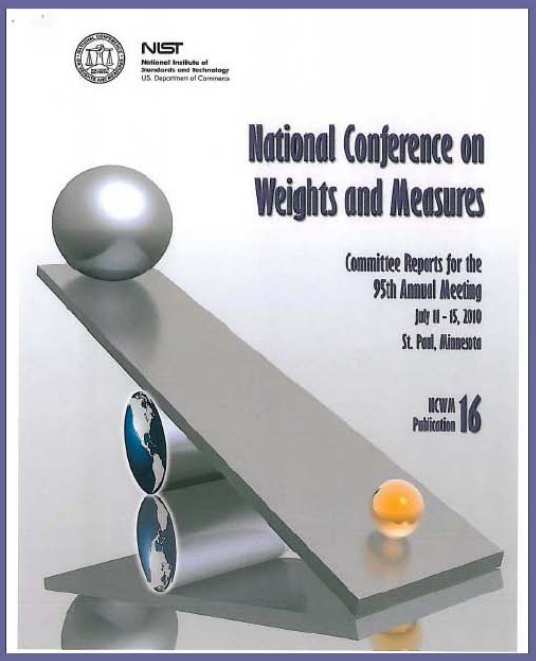
When bedding is sold by weight a higher density has a higher cost per fill, the lower the density the reverse is true. When the bedding product is sold by volume and the cages are always filled by volume, the price per fill is always the same regardless of the density!!

The end user customer receives consistent and fair value bag after bag after bag. And that's the point of W & M regulations -- protecting the end user customer regardless of the industry the user belongs to.

Selling by weight to one industry and to another by volume is inconsistent. Next will be a request by a commodity producer to sell a bag of nuts by piece count instead of total bag weight or how about selling a loaf of bread by the number of slices instead of package weight?

Sincerely yours,

Norman Peiffer
Market Development Manager
Cob Products Division



Colleen Kander
Jerry Reynolds
Cob Products Division,
Maumee, OH

The Andersons

Yearly Lab Bedding Consumed

- Over 453,000,000 cage changes per year for rodents alone.
- Yearly Retail value: $40,000,000
- Over 80% of the market is wood, cobs and paper sold by VOLUME
- Less than 20% is paper and cob sold by WEIGHT
- Bedding dispensed by VOLUME

2.23.1. Packaged animal bedding consisting of granular corncobs and other dry (less than 8 % moisture or less), pelleted and/or non-compressible bedding materials that are sold to commercial (non-retail) end users in the laboratory animal research industry (government agencies, medical centers and universities, pharmaceutical and pre-clinical contract research organizations and other biotech and related research institutions) can still be sold on the basis of weight.
(Added 201X)

We do not agree with the singling out of one product, corn cob, and do not agree with the "exception" as being in the best interest of the end user.

The current regulation recognizes that a consistent bag fill is the proper measure and method of sale to ensure consumer protection.

1. Sales by volume vs weight
   - It's the law!
   - It's a consistent bag fill
   - Cages are filled by volume not by weight
   - Provides consistent number of cage fills and cost per fill

BioMass Products Can Have a Wide Density per Cubic Foot

Loose Density (Per Cubic Foot)

Saw dust & Wood Shavings*	10 to 25 lbs (species dependent)
Corn Cob	1/4" Bedding 20 to 27 lbs 1/8" Bedding 26 to 33 lbs

Density when Compressed (per Cubic Foot)

Pellets

Sawdust	32 to 45
Corn Cob	36 to 45

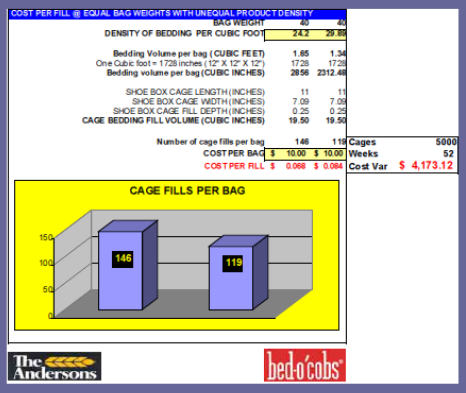
*www.powderandbulk.com

IMPACT OF WEIGHT vs VOLUME

2. Historically …purchased bedding by weight

- The Andersons were one of the first to sell cob bedding to the industry in 1967. Weight was the only measure we knew.
- We were made aware of the volume regulation in 2006 and changed to comply.
- Research labs, both public and private, understand the "consistent measure" and order volumetric bags.
- The "cost per fill" concept is a predictable

Cost per Fill Worksheet

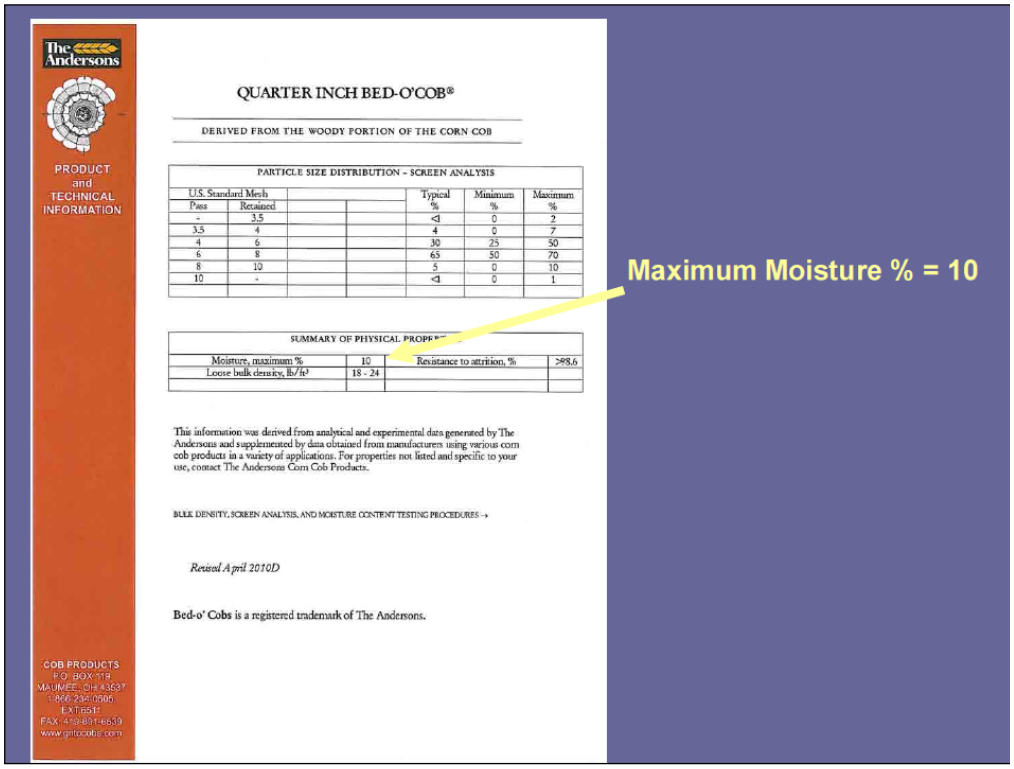


Cost per Fill Comparison

- Same bag Weight
- Same bag cost
- Higher cost per fill on higher density

3. Moisture as an industry standard

– We could not agree more with the moisture level standard. Our published specifications are less than 10% and are typically within the 6 to 8% range.

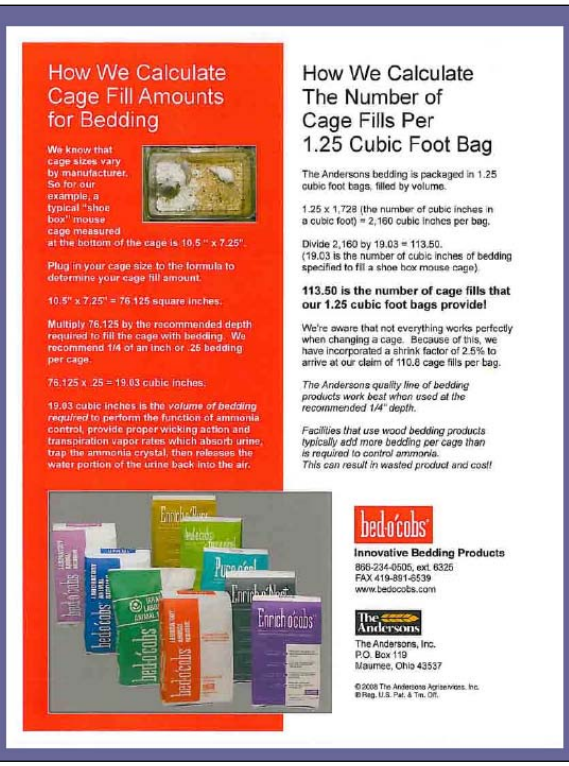


4. Verification of package contents

- -12”x12”x15” = 1.25 cf
  - a cardboard box of these dimensions will verify the content volume
- -Bulk Bags state their dimensions on a sewn in tag.
  - Mathematical calculation will again verify volume contents regardless of the weight

•Is a scale always handy to verify the claimed 1000 lbs of weight?

•A tape measure and a calculator can verify volume



How We Calculate Cage Fill Amounts for Bedding

We know that cage sizes vary by manufacturer. So for our example, a typical "shoe box" mouse cage measured at the bottom of the cage is 10.5 " x 7.25".

Plug in your cage size to the formula to determine your cage fill amount.

10.5" x 7.25" = 76.125 square inches.

Multiply 76.125 by the recommended depth required to fill the cage with bedding. We recommend 1/4 of an inch or .25 bedding per cage.

76.125 x .25 = 19.03 cubic inches.

19.03 cubic inches is the *volume of bedding required* to perform the function of ammonia control, provide proper wicking action and transpiration vapor rates which absorb urine, trap the ammonia crystal, then releases the water portion of the urine back into the air.

How We Calculate The Number of Cage Fills Per 1.25 Cubic Foot Bag

The Andersons bedding is packaged in 1.25 cubic foot bags, filled by volume.

1.25 x 1,728 (the number of cubic inches in a cubic foot) = 2,160 cubic inches per bag.

Divide 2,160 by 19.03 = 113.50.
(19.03 is the number of cubic inches of bedding specified to fill a shoe box mouse cage).

113.50 is the number of cage fills that our 1.25 cubic foot bags provide!

We're aware that not everything works perfectly when changing a cage. Because of this, we have incorporated a shrink factor of 2.5% to arrive at our claim of 110.8 cage fills per bag.

The Andersons quality line of bedding products work best when used at the recommended 1/4" depth.

Facilities that use wood bedding products typically add more bedding per cage than is required to control ammonia. This can result in wasted product and cost!

bed-o'cobs®
Innovative Bedding Products
866-234-0505, ext. 6326
FAX 419-861-6539
www.bedocobs.com

The Andersons
The Andersons, Inc.
P.O. Box 119
Maumee, Ohio 43537

We provide the formula to verify the volume (and the cage fills) for any size bag.


THANK YOU!!
Questions????
The Andersons

NEWCO
DISTRIBUTORS, INC

P. O. Box 1449 • 10700 7th Street • Rancho Cucamonga, CA 91729-1449
PH: (909) 291-2240 • FAX: (909) 291-2241

June 30, 2010

Dear Mr. Jeff Humpreys,

Re: Proposed Revision to Handbook 130, Method of Sale, Section 2.23 – Animal Bedding

As a member of the laboratory animal provisions and supplies industry, we do not support the proposed change that would allow selling of bedding used for laboratory animals to be sold by weight. Below are the specific reasons this proposed change is inappropriate for the laboratory bedding consumer or any end user. These reasons are counter to what is reported on Page L & R 18.

1. There is no incentive for manufactures to produce a lighter product.
The product varies seasonally and cannot be consistently produced to the same density per cubic foot while maintaining the quality of product. Furthermore, the product absorbency is not decreased by making it lighter, it is INCREASED. This was verified in an independent study by C.C. Burns & G.J. Mason, Department of Zoology, University of Oxford, UK, Animal Sciences Department & University of Guelph, Ontario, Canada. Accepted May 12, 2004 the study entitled: "Absorbencies for six different rodent beddings: commercially advertised absorbencies are potentially misleading". The study conclusion is: "By volume, corncob was the most absorbent bedding…". Corncob had the highest absorbency per cm^3…"and "In contrast, reported absorbency values calculated per unit mass would give the misleading impression…" Attached is a copy of the study for your reference.

2. Historically, NIH has purchased primarily wood bedding for their labs, a product that has always been sold by volume.
All customers including pharmaceutical, university research sites and large commercial breeders including Harlan who have purchased wood bedding have bought it by volume. Currently, The Andersons is the largest supplier of corncob to the laboratory animal market, and has been supplying customers since 2006 in government, pharmaceutical, university research sites and contract labs with corncob sold by volume.

3. Moisture range is only part of the equation that determines the density of processed corncobs.
All manufactures comply with the restrictions. Corncob genetic variation of the hybrid seed, seasonal changes in humidity, hammer mill processing, drying and final screening all contribute to the varying cubic density and thus mass of the finished product.

4. Verification of package contents is easy with volume.
The packages are sized to hold the stated volume of the package. The pallets stack heights when filled by volume are all the same heights. A 1.25 cubic foot bag fill can be checked by poured into it into a 1.25 cubic foot box that can be purchased on-line. A simple box with inside dimensions of 12" x 12" x 15" filled to capacity will verify the fill. In the case of bulk sack the dimensions are printed on a tag providing the bag dimensions. Dividing the multiple of all the dimensions by 1728 will yield the volume in cubic feet. Scales vary in accuracy must be calibrated to ensure consistency.

Conclusions:
The sale of dry, granular or non-compressible pelleted bedding is best sold by volume. The cages used to hold the animals are filled by volume in the lab, not by weight. In labs where automatic bedding dispensers are used, they are calibrated to dispense by volume, not weight. The seasonal variance in bulk density inherent in these natural products varies the bag fill and thus cage fill of the bags when the bedding is sold by weight. The bag fill and thus the number of cages fill per bag do not vary when the product is sold by volume.

The industry does not support this change as noted in the final paragraph of page 18 of L & R letter. The Andersons, the largest corncob manufacturer and supplier, nor any of the other largest manufacturers of laboratory bedding industry members commented upon the proposed resolution.

Thank you for your time and consideration

Sincerely,

Sarah Watkins
Sales and Marketing Manager
Newco Distributors Inc-Specialty Division

Absorption Corp "Products and Technology for the Good of the Environment"

July 9, 2010

Kirk Robinson
Washington Department of Agriculture
PO Box 42560
Olympia, WA 98504-2460
Via E-mail krobinson@agr.wa.gov

Dear Mr. Robinson,

I write to you today in opposition of the Proposed Revision to Handbook 130, Section 2.23- Animal Bedding. Absorption Corp is the leading manufacturer of wood pulp (cellulose fiber) small animal bedding in the country, providing product both for the consumer pet trade and to the institutional (laboratory) market. The matter is of interest to your office by virtue of our manufacturing plant in Ferndale, WA that would be impacted by the proposed changes. We ask you to oppose the referenced changes currently before the National Conference on Weights and Measures, Laws and Regulations Committee.

Below are specific reasons that it is inappropriate for laboratory bedding to be sold by weight rather than by volume as has historically been the case in the both the laboratory and retail consumer market.

1. Cages are filled by volume, not weight.
The amount of bedding used in a shoe box cage or micro isolator varies based on the bedding being used. This takes into consideration the characteristics of the substrate. Is the bedding dense and does it provide great absorption capacity? Then less is used. Is the bedding "fluffy", supporting burrowing and nesting, then the cage is filled to a greater depth. The mandated change out interval, type of study, and type of animals in the cage dictate the volume of bedding used. If you ask animal care takers how much bedding goes in each cage they will answer, "about an inch" and not, "100 grams". The comparative factor used by institutional users is, "How many cage fills do I get per bag," and that is a function of volume.

2. The inherent density of many agricultural based substrates varies.
In our case, short fiber waste pulp from pulp mills such as Rayonier, Proctor and Gamble, and Koch and Georgia Pacific, vary in fiber length and the amount of processing to purify wood chips into cellulose fiber. We create a "recipe" to blend our fiber supplies in order to balance out the chemical and physical differences in one fiber stream from another to make a consistent product. However, that consistent product from a performance standpoint is not consistent in density. We test density on an hourly basis during our production run and adjust filling equipment in order to give laboratories the same volume in every bag, and thus the same number of cage fills each time.

Corporate Office
West Coast Production:
6960 Salashan Parkway
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Phone: 360-734-7415
Fax: 360-671-1588

East Coast Production:
2200 Sunset Blvd.
Jesup, GA 31545
Phone: 912-427-4952
Fax: 912-427-7489

Customer Service:
Animal Care Products 800-242-2287
Industrial Products 800-962-6737
email: absorbs@absorption-corp.com

3. Standardized volumetric testing methodology exists.
In our case we use testing methodology designed for cellulose insulation in order to verify density and the volume fill. In the case of wood shavings, a simple 1 cubic foot box test is used to verify the "recovered volume". Wood shavings are another good example of why weight is not a good unit of measure for caging substrate. A compressed bale of shavings, 4 cubic feet in dimension, can weigh 20 pounds if filled with big curly shavings and 50 pounds if filled with sawdust. Both bales will fill the same sized horse stall or the same number of cages. The fact that curly shavings and sawdust don't do the same job of absorbing liquid or controlling ammonia order is a function of the "bedding" in the bag, and not the fact that one is 20 pounds and one is 50 pounds.

4. The same unit of measure may not be appropriate for all bedding substrates.
We sell a granular, flowable, paper substrate into the laboratory market. Since it can be made to be uniform in density, and since we consider it a "litter" rather than a "bedding", we label and sell the product by weight. Our core bedding product is the consistency of shredded egg cartons and looks like gray corn flakes. Since the density varies, we sell it by volume.

5. If the argument for weight is truly bulk super sacks of corn cob, address them separately.
The arguments brought forward by Harlan Industries and Green Products Company concerning verification of volume by the end user when corn cob is purchased in super sacks for use with automatic dispensing machines is a valid one. However periodic checking using the "1 cubic foot box" test by the end user if a discrepancy is suspected is not unreasonable. Neither is requiring a tag listing the density of the corn cob so that volume can be verified with a mathematical calculation from the weight of the super sack. Discussion by the National Conference on Weight and Measures, Laws and Regulations Committee, suggested a solution requiring both a stated volume and weight, which we could support for bulk super sacks only.

6. The proposed changes do not have wide industry support as claimed the by sponsor.
Harlan Industries is not a manufacturer of laboratory bedding substrates; it is a distributor of a wide variety of bedding produced by nearly every major producer of bedding. As such they are not in a position to speak for the ease of implementation of the proposed changes or the motivations of manufacturers who they claim to be intentionally gaming the system. Absorption Corp is only aware of the current discussions to change the requirements to sell laboratory bedding on a weight basis because of third hand information. We have not had discussions with Harlan Industries and were not contacted for comment by any regulatory body.

7. The cost of bedding to the end user will go up with this change.
When the density of our raw material is variable the only way to ensure consistent fill by weight is to invest heavily in technology that can deal with the variability. Unfortunately that will come at a cost to the end user and will result in bags of bedding that do not appear to be uniform in size or shape. We currently sell our cellulose bedding to one

Japanese customer that requires that we give them the same weight in every bag. We apply a surcharge to the bedding to pay for the extra costs involved and continually hav to explain to them why each bag is not the same size or shape, even though it weighs th same.

8. The proposed change may not be motivated by concern for the end user.
The proposed regulatory change is being championed primarily by one company and it corn cob supplier. Are they attempting to use regulatory change to gain a competitive advantage over another supplier rather than letting the market place determine the valu of the alternative features and benefits of its corn cob bedding vs. the major corn cob supplier in the market?

Thank you for reviewing this matter. If we can provide additional information or answ any questions please contact me at 1-800-242-2287 extension 3007 or via e-mail at sdooley@absorption-corp.com.

Regards,

Shawn Dooley
Vice President

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