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COMMENTS TO PROPOSED, REVISED GREEN GUIDES, 16 CFR PART 260, PROJECT NO. P954501

Introduction

On October 15, 2010, the Commission published proposed rules containing revisions to its Guides for the Use of Environmental Marketing Claims (the so-called "Green Guides"). The Commission seeks comment on the proposed revisions and on other issues raised by the Green Guides. This letter contains the comments and recommendations of New NGC, Inc., d/b/a National Gypsum Company ("NGC") to the proposed revisions to the Green Guides, which focus on one particular area of uncertainty and a deceptive marketing practice by one member of the gypsum industry that the Green Guides implicitly espouse and will continue to do so if not clarified in the revisions. This practice, in summary, involves the claim by a manufacturer that its gypsum board product has "recycled content" though it is produced entirely from natural gypsum rock

National Gypsum Company; Forms and Sources of Gypsum

NGC is the second largest producer of gypsum board and related products in the United States and has over 40 facilities that it owns and operates in the U.S. and Canada, plus a joint venture manufacturing operation in Mexico. The company's facilities include eight (8) gypsum rock quarries and mines, including the largest gypsum quarry in the world located in Nova Scotia and seven other such operations spread across the U.S. These facilities, which produce gypsum rock for NGC's wallboard plants and also sell gypsum rock to other companies, including wallboard and Portland cement manufacturers[1], are listed below:

[1] Gypsum comprises approximately 3-5% of the ingredients utilized for the manufacture of Portland cement, to control the set time.

- Milford Station, Nova Scotia.
- National City, Michigan
- Ft. Dodge, Iowa
- Medicine Lodge, Kansas
- Rotan, Texas
- Phoenix, Arizona
- Harper, Texas
- Shoals, Indiana[2]

Gypsum board is produced from natural gypsum ore and also "byproduct gypsum" produced at coal fired power plants from the "scrubbing" operations such plants use to remove sulfur dioxide from their exhaust.[3] Natural gypsum rock is a sedimentary material found in a wide band which stretches diagonally from eastern Canada across the United States and to the Baja Peninsula of Mexico. NGC is at its core a mining company, with over 85 years experience extracting gypsum rock from the ground and processing it for itself and selling it to third party rock customers.

The production of natural gypsum ore is a fairly straightforward mining or quarrying process that is followed by all companies which are engaged in this business:

- The exposed gypsum "seam" is drilled and blasted utilizing carefully controlled explosive charges.
- The large gypsum pieces released from the explosive charges are transported to a crushing operation.
- The crusher reduces the size of the gypsum rock to smaller pieces that can be more easily transported and fed into the pulverizing and calcining operations at the gypsum board plants, or transported to third-party purchasers such as cement manufacturers.
- The quarry crushing operation is not a perfect one. While the rock is crushed and reduced from large boulders to smaller sizes, the smaller sizes can vary greatly. A screening operation can be utilized to divide the crushed rock into different sizes. The size sometimes preferred by certain rock purchasers for transporting and handling (though not necessarily essential) is roughly at least 2 inches in diameter (2"+). Crushed

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[2] The Shoals operations is an underground mine; the other operations are open surface quarries. However, the methods of crushing, producing and using or selling the natural gypsum rock are the same at all such facilities.

[3] Byproduct gypsum is also known as flue gas desulfurization gypsum, or simply FGD gypsum. FGD gypsum is produced by chemical reaction when the exhaust stream from the power plant is first cleansed of fly ash and other particulates and is then passed through a limestone slurry. The reaction between the limestone (calcium carbonate) and the sulfur dioxide produces calcium sulfate, $CaSO_4$, which is chemically identical to natural gypsum rock. FGD gypsum typically has higher purity levels than natural gypsum rock.

rocks of smaller sizes that are screened out, perhaps the size of a quarter coin or less, are referred to as "fines".

It is important to note that the key to production of quality gypsum board and cement, as far as the gypsum rock is concerned, is purity, not the size of the rock; i.e., the percentage of the material that is calcium sulfate ($CaSO_4$). Rock taken from a particular gypsum seam that has been blasted and crushed will produce a quantity of rock that is all approximately the same purity, regardless of the size. In other words, whether the gypsum rock is 2"+ or is comprised of "fines", there is no discernable difference in the purity levels from the same seam of rock. All of it can be used in the production of gypsum board or cement if the purity is at or above the necessary levels.

It is also important to note that FGD gypsum, which is produced by the power plants more or less as a coarse powder, is used not just for the manufacture of gypsum board but also for the production of cement. Its high purity levels often cause it to be preferred over natural rock for both gypsum board and cement manufacturing. It is in fact much, much smaller than gypsum rock fines, with particles measured in microns rather than inches.

NGC produces different sizes of gypsum rock in its quarry and mining operations, including fines. All varieties are commercially usable when minimum purity levels are met and are in fact used by NGC to produce its gypsum board products. NGC also sells large quantities of natural gypsum rock to cement manufacturers throughout the U.S. and also in Canada. Those quantities include fines as well as larger size 2"+ rock. Again, while some users of gypsum rock may prefer larger sizes over fines, all are suitable for use because the purity levels are the same and none of NGC's rock production is ever considered "unusable" or a waste product that would in any way be put back in the ground such as by landfilling. Indeed, if such landfilling of gypsum rock fines were ever performed, already scarce landfill areas in the communities surrounding the quarries and in the quarries themselves would be wasted on the "re-burying" of rock taken out of the ground. Further, to incur the huge economic waste which would result from re-burying perfectly good gypsum rock having a market value would not be a stable or profitable business practice.

LEED and "Green" Building Certification

Over the past twelve years, the United States Green Building Council ("USGBC") has developed, implemented and expanded the LEED system of evaluating building construction. LEED stands for "Leadership in Energy and Environmental Design" and is a rating system for buildings that has become widely accepted in the architectural, materials specifier and construction communities. As described on the USGBC website:

> "LEED is an internationally recognized green building certification system, providing third-party verification that a building or community was designed and built using strategies aimed at improving performance across all the metrics that matter most: energy savings, water efficiency, CO_2 emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts. Developed by the U.S. Green Building Council (USGBC), LEED provides building owners and operators a concise framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions."
> http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1988

LEED (currently) is a voluntary system that "scores" commercial or institutional buildings based upon up to 100 points that can be accrued in the following areas:

1. Sustainable sites
2. Water efficiency
3. Energy and atmosphere
4. Materials and resources, and
5. Indoor environmental air quality
6. Innovation and design

Ten additional points can also be awarded for regional priorities (i.e., the extent to which the building reflects and addresses local environmental concerns).

Under the most recent version, LEED v3, there are four levels of certification, depending upon the total number of accumulated points:

- **Certified** - 40 - 49 points
- **Silver** - 50 - 59 points
- **Gold** - 60 - 79 points
- **Platinum** - 80 points and above

Today, LEED consists of a suite of nine rating systems for the design, construction and operation of buildings, homes and neighborhoods. Five overarching categories correspond to the specialties available under the LEED Accredited Professional program. That suite currently consists of:

- Green Building Design & Construction
- Green Interior Design & Construction
- Green Building Operations & Maintenance
- Green Neighborhood Development
- Green Home Design and Construction

There are tangible economic benefits to having a LEED certified building. According to the

Natural Resources Defense Council:

> "LEED certification, which includes a rigorous third-party commissioning process, offers compelling proof to you, your clients, your peers and the public at large that you've achieved your environmental goals and your building is performing as designed. Getting certified allows you take advantage of a growing number of state and local government incentives, and can help boost press interest in your project." *Natural Resources Defense Council,* http://www.nrdc.org/buildinggreen/leed.asp

There are growing numbers of economic benefits available for LEED certification. Even basic knowledge sites such as Wikepedia outline some examples:

> "Many federal, state, and local governments and school districts have adopted various types of LEED initiatives and incentives. A full listing of government and school LEED initiatives can be found online and is updated regularly.
>
> Some areas have implemented or are considering incentives for LEED-certified buildings. The city of Cincinnati, Ohio adopted a measure providing an automatic 100% real property tax exemption of the assessed property value for newly constructed or rehabilitated commercial or residential properties that earn a minimum of LEED Certified.
>
> In the state of Nevada construction materials for a qualifying LEED building are exempt from local taxes. Pieces of construction that are deemed "inseparable" parts, such as concrete or Sheetrock [i.e., gypsum board], qualify.
>
> The state of Michigan is considering tax-based incentives for LEED buildings.
>
> Many local governments have adopted LEED incentive programs. Program incentives include tax credits, tax breaks, density bonuses, reduced fees, priority or expedited permitting, free or reduced-cost technical assistance, grants and low-interest loans."
> http://en.wikipedia.org/wiki/Leadership_in_Energy_and_Environmental_Design

Who uses LEED? According to the USGBC site:

> "Architects, real estate professionals, facility managers, engineers, interior designers, landscape architects, construction managers, lenders and government officials all use LEED to help transform the built environment to sustainability. State and local governments across the country are adopting LEED for public-owned and public-funded buildings; there are LEED initiatives in federal agencies, including the Departments of Defense, Agriculture, Energy, and State; and LEED projects are in countries worldwide, including Canada, Brazil, Mexico and India. "
> http://www.usgbc.org/DisplayPage.aspx?CMSPageID=222

The growth in importance of LEED certification is beyond question, and many professionals in the building and construction trades believe that it has formed the foundation for the adoption of "minimum green building standards" by various building code bodies. For example, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) has developed Standard 189.1, Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings, in conjunction with the Illuminating Engineering Society of North America (IESNA) and USGBC to provide minimum criteria for green building practices in a form that can be incorporated into building codes. The International Code Council launched development of an International Green Construction Code (IGCC) in 2009. This is significant because historically local building regulations have been based on model building codes. Originally there were three regional groups that developed model codes. However, in the mid-1990s they decided to combine their efforts and formed the International Code Council (ICC), which published the first edition of the model International Building Code (IBC) in 2000. Although there have been a few efforts to develop competing codes, and the IBC itself references other codes, the ICC has become the dominant force in building regulation in the United States. Consequently, it is likely that the IGCC will have a major impact on local government efforts to encourage and/or mandate sustainable building practices. See "*Green Building Codes: Will LEED Certification Requirements Be Replaced by Minimum Green Building Standards*?", Vicki R. Harding, Esq., August 2010. http://www.pepperlaw.com/publications_update.aspx?ArticleKey=1860

The Increasing Demand for "Recycled Content" Products

All this is to say that architects, specifiers, other design professionals as well as builders and building owners, are increasingly insisting on maximizing the number of LEED points in their construction projects to obtain LEED certification. One way to obtain points for a project is to utilize materials for the building that contain or otherwise qualify as "recycled content". The intent is to increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials.[4] To gain points for recycled content under the LEED system, materials with recycled content can be used, and points are awarded if the percentage of such content in the particular building material meets certain threshold levels. "Pre-consumer" and "post-consumer" recycled content are measured, both in weight and cost. **Pre-consumer material** is defined as material *diverted from the waste stream during the manufacturing process*. Excluded is reutilization of materials such as rework, regrind or scrap generated in a process and *capable of being reclaimed within the same process that generated it*. **Post-consumer material** is defined as waste material

[4] LEED® for New Construction and Major Renovations, Ver. 2.2, USGBC October 2005, at page 50.

generated by households or by commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose.[5]

The proposed, revised Green Guides purport to contain some guidance for determining "recycled content" for those charged with certifying a building under LEED:

> "It is deceptive to represent, directly or by implication, that an item contains recycled content unless it is composed of materials that have been recovered or otherwise diverted from the solid waste stream, either during the manufacturing process (pre-consumer), or after consumer use (post-consumer). If the source of recycled content includes pre-consumer material, the advertiser should have substantiation that the pre-consumer material would otherwise have entered the solid waste stream." [6]

The Green Guides do make it clear that spills and scraps that are normally reused by industry within the original manufacturing process – and that, therefore, would not normally have entered the waste stream – do not constitute recycled content.[7]

What is clear, to the best knowledge of NGC, is there is no disagreement in the gypsum industry or among the design professionals that FGD gypsum – by its nature a product which is 100% certain to have to be landfilled if not put to beneficial use in the form of gypsum board or cement manufacturing – does clearly meet the "recycled content" tests. Use of boards made with FGD gypsum thus does provide a means for architects and other design professionals to gain LEED certification points for their clients. FGD gypsum which is suitable for gypsum board production, however, is uniquely a product of coal-fired power plants scrubbing their air emissions to remove SO_2. The power plants that are engaged in scrubbing operations and FGD gypsum production are located almost entirely east of the Mississippi River[8] and thus FGD gypsum is not economically available to gypsum board producers whose plants are located in other areas of the country.

The Claim by a Gypsum Board Manufacturer ("Company X")

Against this backdrop, the definition of "recycled content" and its importance to accumulating LEED certification points and enhancement of building values and incentives, NGC has learned that a gypsum board manufacturer with whom it competes (hereafter, "Company X") is marketing its gypsum board products and making the claim that such products

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[5] Id.
[6] 16 CFR Part 260, §260.12(b).
[7] FTC Green Guides, proposed rule, Section V(F)(1), Footnote 268.
[8] See the listing of coal fired power plants that produce FGD gypsum at http://acaa.affiniscape.com/displaycommon.cfm?an=1&subarticlenbr=67

contain the requisite pre-consumer "recycled content" to earn points under LEED certification rules -- even though such products are in fact made *using natural gypsum rock.*[9]

Company X operates a gypsum board plant in the lower Midwest United States which utilizes natural gypsum rock it purchases from a nearby third-party gypsum quarry. This quarry operation extracts gypsum rock and crushes and otherwise processes it, selling the rock to various customers, including to Company X for gypsum board production; to cement manufacturers; to farmers for agricultural use; to manufacturers of certain joint treatment products; and to companies that utilize gypsum as a food-grade additive. Rock is produced at this quarry in various sizes though its purity, regardless of size, is relatively constant.

The quarry from which Company X obtains its gypsum rock crushes rock into many sizes and separates it by screening, just as NGC does in its own quarries. The cement manufacturers which purchase rock from this quarry prefer rock of a size 2"+, and thus the quarry does not sell these cement manufacturers the smaller size "fines". The fines are simply a natural byproduct of the controlled screening process. Company X then purchases the fines from this quarry and makes the claim that it is removing this gypsum rock – which is of the same purity as the other rock produced at this quarry – from the waste stream. In other words, it is making the claim that because the cement producers that buy rock from the quarry don't want the "fines", such material is in or will somehow be otherwise placed in the "waste stream"[10]. Thus, Company X acquires these "fines" and makes the marketing claim that the wallboard it produces from such "fines" is made of pre-consumer "recycled content".

So, simply stated, gypsum board manufacturer Company X is buying a separate pile of gypsum rock with no material difference in purity compared to the quarry's larger rocks that are more readily available to its cement manufacturing customers. Note that the smaller rocks are nothing more than a byproduct of the crushing process, which can be controlled by the quarry, and thus there is nothing to keep the quarry from simply crushing the larger size rocks into fines that would be sold to Company X.

When examining the practices of "Company X", whose gypsum board plant using the natural rock in question is located west of the Mississippi, in the lower Midwest portion of the

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[9] It is also of note that "Company X" also has two other gypsum board plants east of the Mississippi River that do in fact use FGD gypsum to produce gypsum board products. Company X is thus very familiar with the "recycled content" of FGD gypsum board and also with the "green marketing" methods and advantages in today's building materials marketplace that inure to products having requisite recycled content.

[10] Query – where exactly is this "waste stream" for wallboard-pure natural gypsum rock, the existence of which is essential to Company X being able to claim "recycled content" in a non-deceptive way? Would it be hauled off to some offsite landfill with the community's garbage? That would be an impossible scenario. Of course, what would in fact happen to the "fines" if not purchased by Company X is that they would simply remain in a separate pile of the quarry's inventory of crushed rock, or perhaps blended in with larger rock, and ultimately sold to another purchaser for agricultural use or processed for other customers needing gypsum.

United States and away from FGD gypsum sources, it becomes obvious that they are attempting to score points of market share by claiming their natural rock-produced gypsum board contains recycled content since they do not, and are not able to, economically produce their products using FGD gypsum at that plant. The claim by Company X that its gypsum board contains "recycled content" is intended specifically to market that product to architects, specifiers, design professionals, builders and building owners as a way of gaining LEED certification points. This claim – that the use of small pieces of rock to make gypsum board means such board has pre-consumer "recycled content" -- is deceptive, for the following specific reasons:

- The rock is not in, nor would it ever be a part of, any solid waste stream. It is simply screened gypsum rock which is of a smaller size. It will not be landfilled or "thrown away", but rather is perfectly usable rock which is suitable for gypsum board or cement production, agricultural use, or even further processing as a food additive.
- The rock is capable of being reclaimed within the same process that generated it; i.e., it can be sold by itself or it can be blended in with larger rock before sale.
- The best evidence of the rock's usefulness and to demonstrate that is not part of any waste stream is the fact that it meets Company X's own specifications for the manufacture of wallboard and that they in fact use it without any additional or further processing by the quarry, to produce a commercial product.
- To the extent Company X claims the "fines" are a "waste from cement production", it is important to note that the quarry which extracts the rock is not a "cement producer" at all, and the fines are not an unwanted remnant of any manufacturing process. The cement manufacturers that buy rock from this quarry are third party customers and the "fines" are not – and would never be -- their "waste" material.
- These fines are no different than the fines that NGC itself uses from its own quarries and mine and that it also sells to the same types of Portland cement manufacturers that are buying the gypsum from the quarry supplying Company X.
- Use of the fines from the gypsum quarry to produce gypsum board does nothing to reduce the impacts resulting from extraction and processing of virgin materials (in fact, it contributes to such impacts).
- There exists no credible substantiation that the claimed pre-consumer material -- which is simply natural gypsum rock -- would otherwise have entered the solid waste stream, as the Green Guides now mandate.
- The practice by Company X is most like the practice that the Green Guides already describe as deceptive[11] – the incorporation of spills and scraps that are normally reused by industry within the original manufacturing process and that, therefore, would not normally have entered the waste stream, and the claim that such spills and scraps are "recycled content".

[11] See note 7, above.

Summary and Recommendation for Green Guide Modification

In summary, the Green Guides purport to provide guidance for claims of "recycled content". A number of examples are included in the Green Guides to help companies properly market their products and avoid making unfair and deceptive "green" claims. However, at least in the one instance described in these comments, it is eminently clear to those in the gypsum industry who compete with Company X – and should be made clear to anyone utilizing the guides[12] -- that the claim of "pre-consumer recycled content" in this instance is deceptive and should cease. Currently, in the absence of deceptive claims such as those being made by Company X, only gypsum board produced using FGD gypsum would contain the requisite amount of pre-consumer recycled content and thus qualify for LEED certification points. Building owners and design professionals, and quite likely national and local code bodies at some point in the near future, are increasingly requiring the use of gypsum board products containing "recycled content". A claim such as that being made by Company X is deceptive as directed toward such parties and if allowed to exist clearly provides Company X with an unfair competitive advantage in the marketplace.

With one, very minor modification to its Green Guides, the Commission can address this deceptive practice and provide clear guidance to all manufacturers who acquire and use extracted minerals to produce their products – by adding one additional example of what is not "recycled content" to the Guides at the appropriate location. The suggestion offered by NGC is to add the following as **Example #14** at the end of §260.12:

> "**Example 14**: A manufacturer utilizes a naturally-occurring ore as a raw material in its process. The quarry that sells this ore to the manufacturer extracts and crushes it to varying sizes, but all sizes have approximately the same quality and purity levels. The quarry sells the ore to various customers who use it to make a variety of different products, and who prefer different sizes of the ore based upon their own unique handling and processing requirements. The manufacturer is able to use larger size or smaller size ore in its processes, but in fact chooses to use smaller size ore from the quarry. The

[12] Underwriter Laboratories ("UL") lists and provides regular review of a number of different fire rated systems produced by the members of the gypsum board industry. Recently, UL has organized a branch of its operations devoted to the review and listing of products that it considers meet certain minimum criteria for sustainability and "green" properties. This UL branch, known as "UL Environment", or "ULE", will be providing "Sustainable Product Certification" and "Environmental Claims Validation". Unfortunately, ULE has tentatively indicated that it subscribes to Company X's claim of "recycled content" for its use of natural rock "fines" in its gypsum board products. NGC is informed that ULE is awaiting the Commission's publication of the final Green Guides rule to decide whether to provide Company X with a "ULE" listing and thus approval of this deceptive practice. Consequently, it is incumbent on the Commission to address and clarify this specific type of claim in its final Green Guides.

manufacturer claims that its product produced from this small sized ore has "pre-consumer recycled content" because it is not used by other of the quarry's customers who prefer the larger size ore. This claim is deceptive because the small size ore is not part of any waste stream nor is it material that would be landfilled as a waste material. The purity is the same as other ore produced by the quarry and even though not a size perhaps preferred by one of the quarry's customers it remains commercially usable by any of the quarry's other customers, including the manufacturer in this example, to produce other products utilizing such ore."

If the Commission agrees that the claims of Company X are deceptive, then clarification by appropriate modification to the Green Guides is essential. If such clarification is not forthcoming, the practice and the claims by Company X will continue and will serve as precedent for all others in the gypsum board industry – and any other manufacturers of products made using naturally extracted minerals – to make the same such claims.

Thank you for your consideration of these comments. If you have any further questions, please let me know.

Very truly yours,

Samuel A. Schiffman

SAS/me