RFCI

RESILIENT FLOOR COVERING INSTITUTE

March 14, 2006

VIA E-MAIL

Chris A. Geiger, Ph.D.
Integrated Pest Management Program Manager/
City Toxics Reduction Coordinator
San Francisco Department of the Environment
11 Grove Street
San Francisco, CA 94102

Re: Comments on SFE's Draft List of Targeted Product Categories under the Precautionary Purchasing Ordinance

Dear Mr. Geiger:

The Resilient Floor Covering Institute (RFCI) appreciates the opportunity to submit these comments on the San Francisco Department of the Environment's (SFE) draft list of targeted product categories, as distributed at the March 6, 2006 meeting, to implement the City's Precautionary Purchasing Ordinance. RFCI is a trade association of resilient floor covering producers in North America who manufacture tile, sheet vinyl, linoleum or rubber products for residential and commercial flooring installation. RFCI also includes, as associate members, suppliers of raw materials used in the manufacture of resilient flooring and manufacturers and suppliers of products used in the installation and maintenance of resilient flooring. A membership list is attached as Appendix A.

The SFE's draft list of the 10 Targeted Product Categories includes the category "Building Maintenance (Non Janitorial) - Consumable Supplies," which consists of the following products with disparate characteristics: lighting, carpet, flooring, wall covering, lumber, plumbing, concrete, and plastic sheeting/rolls. SFE scored the "Building Maintenance (Non Janitorial) - Consumable Supplies" category at 10 total points and included it on the list of 10 Targeted Product Categories as a Tier II medium priority, even though the category was out scored by six other product categories covered by the ordinance (i.e., energy related equipment, energy related consumables, vehicular equipment, clothing & textiles - consumable supplies, office chemicals, and clothing & textiles - chemicals). In general, SFE did not list these higher scoring product categories because few opportunities existed due to established city programs. For the reasons set out below, RFCI believes that flooring should not be included in the initial list of targeted product categories. Moreover, in the event "Building Maintenance (Non Janitorial) - Consumable Supplies" -- and, more specifically, flooring -- remains on the Targeted

Product Category list, SFE should not begin to develop specifications for flooring until a nationally recognized environmentally preferable product standard for resilient flooring, which is currently under development, is issued.

RFCI believes that SFE should reconsider listing "Building Maintenance (Non Janitorial) - Consumable Supplies" as a Targeted Product Category given that six other higher scoring product categories are not included in the list of 10 Targeted Product Categories. While implementation issues are a worthy consideration in deciding whether to list a product category, the worst scoring products should be a top priority for standard development and should not be easily passed over due to implementation concerns. Even though opportunities may be limited in these higher scoring categories, the benefits of addressing the higher scoring product categories should outweigh the narrower opportunities. Moreover, SFE should consider establishing lighting as a separate, independent product category given that the inclusion of lighting in the "Building Maintenance (Non Janitorial) - Consumable Supplies" category has skewed the overall scoring of that category. Specifically, SFE has determined that lighting equipment offers a potentially significant opportunity to improve SFE standards on mercury content, lamp life and energy efficiency.[1] In addition, SFE's stated "justification" for the "Building Maintenance (Non Janitorial) - Consumable Supplies" category recognizes that materials other than lighting (and lumber) are often under service contracts, a fact which SFE has used to justify excluding other higher scoring product categories. Thus, lighting appears to be very different than other products in the overall category and should be treated separately.

Development of a nationally-recognized, consensus-based environmentally preferable product standard for resilient flooring is currently underway. On November 11, 2005, the American National Standards Institute (ANSI) published notice in *Standards Action* that the National Sanitation Foundation (NSF), an ANSI-accredited, globally recognized consensus-based standards developer, had received a Project Initiation Notification (PIN) number to develop a "Sustainability Assessment Standard - Resilient Floor Coverings." This standard will "establish a consistent approach to the evaluation and determination of environmentally preferable and sustainable resilient floor coverings" and will include criteria across resilient flooring's life cycle from raw material extraction through manufacturing, use and end-of-life management. *Standards Action*, 13 (Nov. 11, 2005).

We expect that the environmentally preferable product standard for resilient flooring will include indoor air quality (IAQ) criteria. In that regard, in May 2005, RFCI introduced FloorScore, a new voluntary IAQ program that tests and certifies hard surface flooring for compliance with health-based criteria adopted in California under the Section 01350 program.[2] FloorScore is the first building materials emissions testing program that requires both an

[1] We note that resilient flooring manufactured in by RFCI members does not contain mercury, lead, cadmium based stabilizers and, thus, is distinct from the mercury and lead concerns raised about lighting.

[2] The first generation of emissions testing programs for building materials focused on total VOC emissions (TVOCs). Recently, however, scientists and researchers have generally agreed that the true indication of good IAQ is not necessarily the TVOCs emitted from a building material, but rather the impact of the individual VOCs emitted. See, e.g., California Integrated Waste Management Board, Building Material Emissions Study, 3 (Nov. 2003) ("TVOCs cannot be used to indicate potential health effects"). Thus, the rapid growth of programs like the indoor air portion of the California Section 01350 Special Environmental Requirements, which establish IAQ emission limits for individual VOCs.

independent testing laboratory and independent third-party certification (i.e., Scientific Certification Systems, Inc. (SCS)). More specifically, to obtain FloorScore certification, a hard surface flooring product must meet the following two requirements:

(1) Comply with the emissions criteria of the California Section 01350 program, which includes maximum emission concentrations for more than 78 VOCs emitted from building materials. Emissions tests must be performed by an SCS-approved independent test laboratory in accordance with the California Department of Health "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers" (CA/DHS/EHLB/R-174); and

(2) Comply with the requirements in SCS-EC-10-2004 Environmental Certification Program – Indoor Air Quality Performance (available at www.scscertified.com).

The maximum emission concentrations identified in the California Section 01350 program are based on one-half the health-based Chronic Reference Exposure Levels for listed VOCs established by the California Office of Environmental Health Hazard Assessment. Products that meet the Section 01350 criteria qualify for use in high performance schools and office buildings in California.

Since RFCI introduced FloorScore in May 2005, over 200 hard surface flooring materials have been certified as complying with the California Section 1350 program, which has required reformulating some products to reduce indoor air emissions. RFCI also has applied for a credit for FloorScore certified products in the United States Green Building Council's LEED Rating System, which has been adopted by the City in its Green Building Ordinance. The rigorous requirements for FloorScore certification -- California Section 01350 emissions limits for individual VOCs, independent laboratory testing, documented control system and site audits per SCS EC-10-2004, and independent third-party certification -- ensure a low emitting flooring product that contributes to good indoor air quality in order to protect human health.

We also expect that the environmentally preferable product standard for resilient flooring will integrate life cycle analysis, which is widely recognized by the Federal government and others as the best approach for measuring true environmental performance.[3] Life-cycle analysis considers multiple environmental impacts over the entire life of a building product, including trade-offs and shifts of environmental problems from one life-cycle stage to another and from one environmental medium to another. The National Institute of Standards and Technology's BEES analytical program -- Building for Environmental and Economic Sustainability -- which is funded by U.S. EPA, is considered state-of-the-art for assessing the life-cycle environmental impact of building materials and demonstrates that resilient flooring is a strong environmental performer. Specifically, with respect to resilient flooring, BEES 3.0 has evaluated the environmental performance of vinyl composition tile (VCT), a representative example of vinyl

[3] See Executive Order 13101, "Greening the Government Through Waste Prevention, Recycling and Federal Acquisition," 63 Fed. Reg. 49643 (Sept. 16, 1998) (requiring federal agencies to consider life-cycle factors in acquisition planning); U.S. EPA Final Guidance on Environmentally Preferable Purchasing for Executive Agencies, Guiding Principle 3, 64 Fed. Reg. 45810, 45819 (Aug. 20, 1999) (recognizing that a product's "environmental preferability is a function of multiple attributes from a life-cycle perspective").

flooring, as well as three other flooring materials that are commonly recognized as "green": (1) recycled polyester broadloom carpet; (2) ceramic/recycled glass tile; and (3) linoleum. The results of the BEES life-cycle analysis (see Appendix B) show that VCT has a lower overall impact on the environment than recycled polyester broadloom carpet and linoleum and compares favorably to ceramic/recycled glass tile.[4]

RFCI strongly believes that the environmentally preferable product standard for resilient flooring currently under development by NSF should be in place before SFE decides what types of flooring are environmentally preferable and specifies flooring criteria under the Precautionary Purchasing Ordinance. That forthcoming consensus-based standard will be valuable, objective tool in identifying environmentally preferable flooring products.

Thank you for considering RFCI's comments. If you have any questions regarding these comments, please contact me.

Sincerely,

Douglas W. Wiegand

Douglas W. Wiegand
Managing Director

Enclosures

[4] Consistent with the BEES results, U.S. EPA itself selected vinyl floor covering for its laboratory complex in Research Triangle Park, North Carolina, because the Agency found vinyl to consume less energy and natural resources during production than linoleum. U.S. Environmental Protection Agency. *Leading by Example: Two Case Studies Documenting How the Environmental Protection Agency Incorporated Environmental Features into New Buildings* (1997).

Appendix A

RESILIENT FLOOR COVERING INSTITUTE MEMBERSHIP

REGULAR MEMBERS

Amtico International Inc. - Atlanta, Georgia
Armstrong World Industries, Inc. - Lancaster, Pennsylvania
Congoleum Corporation - Mercerville, New Jersey
Losetas Asfalticas, S.A. de C.V. - Mexico City, Mexico
Mannington Mills, Inc. - Salem, New Jersey
Tarkett Inc. - Farnham, Quebec Canada

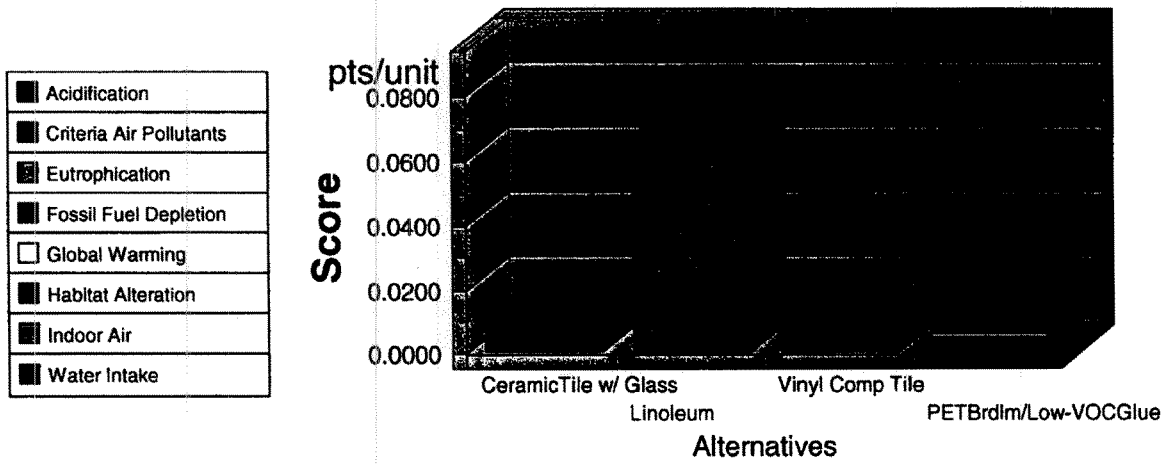
ASSOCIATE MEMBERS

BYK-Chemie USA
Cascades Inc.
Dow Reichhold
Eastman Chemical Company
ExxonMobil Chemical Company
Ferro Corporation
Formosa Plastics
Interface Solutions, Inc.
MAPEI Corporation
Occidental Chemical Corporation
Omya (Canada) Inc.
Para-Chem Southern, Inc.
PolyOne Corporation
PPG, Inc.
Specialty Minerals Inc.
W.F. Taylor

June, 2005

BEES 3.0
(Equal Weights)

Environmental Performance



Note: Lower values are better

Category	Tile/Glass	Linoleum	VCT	PETBrdlLow
Acidification--13%	0.0000	0.0000	0.0000	0.0000
Crit. Air Pollutants--12%	0.0018	0.0004	0.0032	0.0018
Eutrophication--13%	0.0002	0.0656	0.0003	0.0003
Fossil Fuel Depl.--13%	0.0014	0.0008	0.0013	0.0020
Global Warming--13%	0.0009	0.0002	0.0009	0.0011
Habitat Alteration--12%	0.0000	0.0000	0.0000	0.0000
Indoor Air--12%	0.0000	0.0000	0.0000	0.0045
Water Intake--12%	0.0000	0.0003	0.0001	0.0001
Sum	0.0043	0.0673	0.0058	0.0098