# Minutes
GBI Consensus Body Meeting #16
BSR/GBI 01-201X
Webinar
Monday, May 25th, 2016 1:00 PM ET to 4:00 PM ET

## Attendance:

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Organization(s)</th>
<th>5-9-16</th>
<th>5-25-16</th>
<th>6-6-16</th>
<th>6-22-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gregg Bergmiller</td>
<td>S/L/A/M Collaborative</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Paul Bertram</td>
<td>Kingspan Insulated Panels, Inc.</td>
<td>Absent</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Allan Bilka</td>
<td>International Code Council</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Jeff Bradley</td>
<td>American Wood Council</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>William Carroll</td>
<td>American Chemistry Council</td>
<td>Absent</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Chris Dixon</td>
<td>NBBJ (rep. self)</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Nicole Dovel-Moore</td>
<td>CTA Architects Engineers</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Amber Dzikowicz</td>
<td>NSF International</td>
<td>X</td>
<td>Absent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>David Eldridge</td>
<td>Grumman/Butkus Assoc.</td>
<td>X(by proxy)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>William Freeman</td>
<td>Resilient Floor Covering Institute</td>
<td>X</td>
<td>X(by proxy)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Susan Gitlin</td>
<td>U.S. EPA</td>
<td>X</td>
<td>X(by proxy)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Don Horn</td>
<td>GSA</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Josh Jacobs</td>
<td>UL Environment</td>
<td>Absent</td>
<td>Absent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Greg Johnson</td>
<td>Johnson Consulting Services, Greenscape Alliance</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Karen Joslin</td>
<td>Admin. Office of the U.S. Courts</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Malee Kaolawanich</td>
<td>NIH (rep. self)</td>
<td>X</td>
<td>Absent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Rachel Minnery</td>
<td>AIA</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Charles Kibert</td>
<td>University of Florida</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Gary Keclik</td>
<td>Keclik Associates</td>
<td>Absent</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Name</td>
<td>Company/Institution</td>
<td>Status</td>
<td>Notes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-----------------------</td>
<td>------------------------------------------</td>
<td>-------------</td>
<td>----------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>John Koeller</td>
<td>Alliance for Water Efficiency</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Jennifer Kowalonek</td>
<td>Alfred Benesch &amp; Company</td>
<td>X</td>
<td>Absent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Tien Peng</td>
<td>National Ready Mix Concrete Assn.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bernadette Reyes</td>
<td>Clark Construction Group</td>
<td>Resigned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Angela Rivera</td>
<td>URS Corporation (rep. self)</td>
<td>Resigned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Jane Rohde</td>
<td>JSR Assoc. Inc., Vinyl Institute</td>
<td>X(by proxy)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Julie Sobelman</td>
<td>Independent Consultant</td>
<td>Resigned</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Kent Sovocool</td>
<td>Southern Nevada Water Authority</td>
<td>X(by proxy)</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>Steve Strawn</td>
<td>JELD-WEN</td>
<td>Absent</td>
<td>Absent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>George Thompson</td>
<td>Chemical Compliance Systems, Inc.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Angela Tin</td>
<td>American Lung Assn.</td>
<td>Absent</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Douglas Tucker</td>
<td>Misubishi Electric Cooling &amp; Heating</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Erika Winters Downey</td>
<td>American Institute of Steel Construction</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Voting Alternates**

<table>
<thead>
<tr>
<th></th>
<th>Name</th>
<th>Institution</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Abby Brokaw</td>
<td>American Lung Assn. (voting Alternate for Angela Tin)</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Paul Karrer</td>
<td>AIA (Alternate for Rachel Minnery)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bill Hoffman</td>
<td>UL Environment (Voting Alternate for Josh Jacobs)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lance Davis</td>
<td>GSA (Voting Alternate for Don Horn)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D’Lane Wisner</td>
<td>D’Lane Wisner (Voting Alternate for William)</td>
<td></td>
</tr>
</tbody>
</table>
**Wednesday, May 25, 2016**

**Welcome & Roll Call**

Secretariat, Maria Woodbury welcomed participants and conducted roll call by self-introductions to establish quorum. The anti-trust statement was reviewed and participants were requested to comply with it fully.

Woodbury reviewed the participation options, stating that while observers are welcome to participate in the discussion, only Consensus Body Members are able to vote. Participants were reminded to raise

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Visitors</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Martha VanGeem</td>
<td>Self (Principal Engineer)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Kyle Thompson</td>
<td>IAPMO</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Kelly Scanlon</td>
<td>U.S. EPA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heather Dylla</td>
<td>National Asphalt Pavement Assn.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Wes Sullens</td>
<td>Stopwaste.org</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Paula Melton</td>
<td>BuildingGreen, Ince</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Mike Cudahy</td>
<td>Plastic Pipe and Fitting Association</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>Staff/Consultants</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wayne Trusty</td>
<td>Chair</td>
<td></td>
<td>Resigned</td>
</tr>
<tr>
<td>Michael Lehman</td>
<td>Chair</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Vicki Worden</td>
<td>Executive Director, GBI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emily Randolph</td>
<td>Secretariat Asst., GBI</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Micah Thomas</td>
<td>Staff, GBI</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Maria Woodbury</td>
<td>Secretariat, GBI</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Chelsea Amaio</td>
<td>Staff, GBI</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Kim Goldsworthy</td>
<td>Roberts-Rules Consulting</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
hands should they desire to add something new to the discussion and staff would then call on them in order.

At this meeting, no members voted using a voting alternate. There were 2 members voting via proxy (Don Horn for Susan Gitlin and Jane Rohde for Bill Freeman).

Woodbury informed participants that the call was being recorded for the purpose of minute taking and no objection was raised. Woodbury stated that the recording would not be shared outside of Staff.

Administrative Procedures and Related Matters
Chair Michael Lehman reviewed the agenda. Lehman reminded the Subcommittee chairs that they could make motions themselves in order to keep the process moving forward smoothly.

The agenda was reviewed and no changes were requested by the Consensus Body.

MOTION: A motion was made, seconded, and carried to approve the minutes from the previous Consensus Body Meeting on May 9th, 2016.

Discussion of public comments Subcommittee Reports
Project Management

• 49 – 4. Substantive. 5.1
  o Comment: integrated design process (IDP): a process in which the project team is led by an individual and/or a team of individuals in the setting and ranking of measurable sustainable design and project delivery goals through an integrated process, and which facilitates reporting mechanisms to report to the team and owner on the progress made toward each goal, along with documentation of the process. a holistic approach to building design and construction where project team members from all disciplines work together throughout the project design process. It emphasizes clear and continuous communication, rigorous attention to detail, and active collaboration among all team members.
  o Reason: The current definition for integrated design process is not accurate and sounds more like a charrette and reporting description. Revise to define the term more accurately.
  o Proposed Response: Accept as Modified. “a holistic approach to building project design and planning construction where project team members from all disciplines work together throughout the project design and delivery process. It emphasizes clear and continuous ongoing communication, rigorous attention to detail, and active collaboration among all team members.” The text was modified to provide clarity and consistency.
  o Subcommittee Vote: 2 in favor, 1 opposed, 1 abstained
MOTION: The motion was made and seconded to accept proposed response, accept as modified. Discussion took place on the motion:
It was stated that “construction” and “design” should remain included in the definition. This sentiment was echoed by others.

The question was raised about how GreenGlobes assessors would verify this approach.

The question was raised about why this is definition of IDP is different from the definition found in the ANSI Standard? It was clarified that this is the definition the Project Management Subcommittee devised for the purposes of the GBI Standard. It was also clarified that this language pertains solely to the definition not the criteria language in the Standard.

The opinion was made that the word “all” is limiting where it pertains to “all team members”

AMENDMENT: The amendment was made and seconded to strike “from all disciplines” and “all”.

Discussion took place on the Amendment

- Inconsistency was pointed out between the credit language and the definition. The definition states “all team members” but projects can get points for only having less than all team members involved. The speaker was in favor of the amendment and others echoed this sentiment.

- Some members voiced opposition to the amendment. It was stated that “all team members” should not be removed since it is important that they work together throughout the planning project. It was stated that the definition was intentionally written to include all team members.

- A question was raised about including “multiple disciplines” so that the definition doesn’t contradict the credit language.

The amendment was revised and seconded to replace the first “all” with “multiple”, while striking the second “all”. There was no opposition to the revision of the amendment. There was no opposition to the revised amendment.

Discussion took place on the revised Motion:

- There was concern that the overall definition is still too weak. Assessors look for outcomes, not the process. It was stated that the ultimate goal is to achieve an holistic approach and the speaker felt that this overall definition falls short of that goal.

AMENDMENT: The amendment was made and seconded “….collaboration with the objective of achieving holistic solutions”

There was opposition to the amendment:

- It was stated that the speaker felt this was redundant with the “holistic” at the beginning of the definition.

- One speaker felt that the revised definition was watered down from the original definition. The point was raised that goals and planning should be included in the definition as that is the point of an IDP.

- The maker of the amendment clarified that they had intended the goals to be implicit in the language of the amendment.

The amendment was revised to include goal setting as follows: “emphasizes goal setting….collaboration with the objective of achieving holistic solutions”

VOTE: the Amendment carried with 19 in favor, 0 opposed, and 2 abstained.

None Opposed
Abstained: Kent Sovocool, Tien Peng

Further discussion took place on the motion:

- It was stated that while one member is in favor of most of the amendments they are still against striking the word “all” and would vote against the motion.

VOTE: the Amended Motion carried with 17 in favor, none opposed, and 4 abstained.
None Opposed.
Abstained: Don Horn, Susan Gitlin, Kent Sovocool, Tien Peng

**36 – 3. Substantive. 6.1.1.1**
- **Comment:** Define “Green design goals”.
- **Reason:** The lack of definition leaves you open to get all kinds of crazy irrelevant goals submitted for credit.
- **Proposed Response:** Reject. The Green Design Goals are the bulleted items below and those are the items where the committee expects a response or goal from the project team so a definition is not required in the charging paragraph.

**MOTION:** The motion was made and seconded to accept the proposed rejection.
The motion carried with 22 in favor, none opposed, and none abstained.
None Opposed
None Abstained

**49 – 7. Substantive. 6.1**
- **Comment:** Why are we only including two sub-bullets underneath indoor environment? What about goals around thermal comfort, ventilation or daylighting? or use of low-emitting materials?
- **Reason:** Include these at a minimum to drive the project’s performance goals up-front.
- **Proposed Response:** Accept as modified. The committee added thermal comfort, lighting, and air quality to the bulleted list under Indoor environment and broke building resilience out into its own separate bullet, striking the word “issues”. The modifications clarify the language without narrowing the focus of the criteria.

**MOTION:** The motion was made and seconded to accept proposed response. The motion carried with 23 in favor, none opposed, and none abstained.
None Opposed
None Abstained

**34 – 4. Substantive. 6.1.1.1**
- **Comment:** Five points are earned for evidence of occupancy review and assessment.
- **Reason:** Other than a contractual arrangement that is subject to negation, I am not aware of a way to ensure meaningful "occupancy review and assessment" at the time of the NC Stage II review.
- **Proposed Response:** Reject. The Project Management Subcommittee wants to incentivize an occupancy review and assessment. The post-occupancy study is included in 6.1.3 Recommended Documentation. Verification will require a written plan and contract for the work. The language in the last bullet point has been revised: “Five points are earned for a written plan and contract for the work for occupancy review and assessment.”

**MOTION:** The motion was made and seconded to accept proposed response.
Discussion took place on the motion:
• Clarification was made that the text being considered was in the points column of the criterion.
• There was discussion about whether the proposed response should be “Reject” or “Accept as modified” since the proposed response has a change to the language. One speaker felt that either the language change should be eliminated or the response should be changed from reject to “accept as modified”. Staff stated that “reject” is an acceptable response based on what has been done in previous votes. It was clarified that the commenter’s suggestion to delete has been rejected, but then a modification to the language has been made.

AMENDMENT: The amendment was made and seconded to change “reject” to “accept as modified”. There were no objections to the amendment.
VOTE: the motion carried with 21 in favor, none opposed, and 1 abstained.
None Opposed
Abstained: Chris Dixon

Resilience
At the in-person meeting the CB voted to create a task group to look at resilience in relation to the draft Standard. Project Management Chair and Resilience Task Group member Karen Joslin presented new language as drafted by the task group and reviewed by the Project Management Subcommittee for inclusion in the Project Management Assessment Area.

MOTION: The motion was made and seconded to add resilience language to the Standard for consideration in the second Public Comment period.
Discussion took place on the motion:
• Background was given as to how this language was developed. It was clarified that this language is not a direct response to a specific comment. It was a direct response to what was discussed in Chicago. It was also stated that several comments bring up the issue of resilience.
• The questions were raised whether this is a new section to be added and how will points be allocated. The speaker wondered if points will be taken from pre-existing criteria. It was clarified that the current points are placeholder points that demonstrate the appropriate weighting as points should be distributed for each new criterion. It was stated that the exact points for the new criteria will be addressed when the Subcommittee reexamines point allocation as a whole.
• The question was raised about Building Design Parameters Specifically if Building Design “and Operations” could be included in the text.
• Another speaker requested the inclusion of “Building Owners” in addition to the “Building Designers.”

AMENDMENT: The Amendment was made and seconded to change the text to “building owners and designers” in 6.1.3.1 at the end of the first sentence. There was no opposition to the amendment.

AMENDMENT: The amendment was made and seconded to change 6.1.3.3 so that it reads “...into the building design and operation parameters...”
Discussion took place on the amendment:
• Concern was raised that adding “Operations” will confuse users about the intent of the criterion.
VOTE: the amendment failed with 6 in favor, 11 opposed, and 4 abstained.
Further discussion took place on the amended motion:

- One member stated that they felt terrorism to be unrelated to the issue of resilience. The speaker also felt that natural events should not be included.
  - It was stated that resilience is defined as the regularity and severity of events.
  - Concern was raised that anything outside of climate change effects are beyond the purview of green building. It was stated that continuity is handled in risk management and seismic events are covered in codes.
  - It was stated that the science behind risk from increased disasters (i.e. hurricanes and tornadoes) is not completely clear, but these events are related to climate change. The question was raised if there are design parameters that address location-specific risks included in the design plan.
  - A question was raised about voting this language forward without providing assessment tools and informational references. It was clarified that if this language is voted forward, it would go to the second Public Comment period and comments could be submitting requesting the addition of assessment tools and references.
- Opposition was raised against including resilience in the Standard at all. The opponent felt resilience is too complicated and many locations (i.e. Florida) can’t be insured because of location. Concern was raised that teams can’t design for a tornado.
- It was clarified that this language was not written by the concrete industry. It was stated that the language has to do with risk and that once project teams know the risks involved they can decide whether they want to implement changes in their design based on potential risk.

VOTE: the motion carried with 9 in favor, 5 opposed, and 3 abstained.

Opposed: Chris Dixon, Charles Kilbert, Paul Bertram, Don Horn, Susan Gitlin

Abstained: Jeff Bradley, George Thompson, Nicole Dovel-Moore

Indoor Environmental Quality

Newly appointed Vice Chair of the Indoor Environmental Quality Subcommittee, Chris Dixon presented the proposed responses to comments received in the IEQ Assessment Area:

- 40 – 6. General. 11.2.1.1
  - Comment: Section 11.2.1.1 relates to adhesives and sealants that are applied on site inside the building envelope. Clarification is needed to determine the boundary of the building envelope.
  - Reason: The building envelope is generally an assembly of components and not a single material. For example a single-ply roof system might be considered the building envelope boundary at the top of a building. Such a system might include a roof membrane, insulation, cover board, and attachment components such as fasteners or adhesive. One might conclude that only items inboard of roof system components would be considered "inside" the building envelope and thus roof membrane sealant would not be subject to the VOC emission criteria noted in section 11.2.1.1 and such components should not be listed in Table 11.2.1.1 (USGBC has generally taken this view for LEED projects).
- Proposed Response: Accept as modified and also apply to 11.2.1.2: “applied on site within, or are a part of, the building’s continuous plane of air tightness inside the building envelope”
- Subcommittee Vote: Unanimously in favor

MOTION: The motion was made and seconded to accept proposed response

Discussion took place on the motion:
- A question was raised about whether the new language is better than the old language. The speaker felt that the term “building envelope” is easier to understand.
  - It was clarified that the term “building envelope” doesn’t provide detailed enough parameters and that the credit is truly concerned about the plane of air tightness.
  - Concern was raised about the proposed language being difficult for a lay person to understand. The speaker felt that “Building envelope” should be included and then defined in the text.

AMENDMENT: the Amendment was made and seconded to remove “are a”. There was no opposition to the amendment.

AMENDMENT: the Amendment was made and seconded to change the language to read, “The building envelope’s continuous plane of air-tightness”. There was no opposition to the amendment.

VOTE: the amended motion carried with 19 in favor, none opposed, and none abstained.

None Opposed
None Abstained

- 51 – 4. Substantive. 11.2.1.1
  - Comment: 11.2.1.1 Adhesives and sealants (not including carpet adhesives) that are applied on site inside the building envelope comply with VOC content limits for 90% of products by volume and/or VOC emissions criteria for 70% of products by volume. Certified products meet the VOC content and emissions criteria.
  - Reason: Limiting VOC content effectively reduces the contribution to photochemical smog, an ambient air pollution issue. Limiting VOC emissions effectively reduces indoor TVOV and levels of specific VOCs indoors (indoor air pollution). These are two different problems and both should be addressed. Hence the VOC requirement should address both VOC content (ambient smog) AND VOC emissions (IAQ).

- 51 – 5. Substantive. 11.2.1.2
  - Comment: 11.2.1.2 Paints and coating applied onsite inside the building envelope comply with prescribed limits of VOC content limits for 90% of products by volume and/or VOC emissions criteria for 70% of products by volume. Certified products meet the VOC content and emissions criteria.
  - Reason: Limiting VOC content effectively reduces the contribution to photochemical smog, an ambient air pollution issue. Limiting VOC emissions effectively reduces indoor TVOV and levels of specific VOCs indoors (indoor air pollution). These are two different problems and both should be addressed. Hence the VOC requirement should address both VOC content (ambient smog) AND VOC emissions (IAQ).
  - Proposed Response: Reject 51 – 4. and 51 – 5. Determine VOC reporting based on content not on emissions given that these studies are expensive and not required. This allows manufacturers time to transition to newer technology which would allow both types of testing.
Subcommittee Vote: 5 in favor, 1 opposed

MOTION: The motion was made and seconded to reject the comment using the proposed response.
The motion carried with 17 in favor, none opposed, and 5 abstained.
None Opposed
Abstained: Kent Sovocool, Erika Winters-Downey, Don Horn, Susan Gitlin, John Koeller

13 – 3. Substantive. 11.2.1.1

Comment: Provide documentation indicating compliance with the VOC content requirements or a certification by a third-party testing organization including, but not limited to, one of the following:
UL EcoLogo – UL Environment
UL 2762 Sustainability for Adhesives

Reason: Certification is not used to demonstrate compliance with VOC content regulations. In order to sell such products in the US, the manufacturer must declare the VOC content on product labels and on technical data sheets. Measurements may be conducted in-house by manufacturers.
Listed programs are not testing organizations but rather product labeling programs and should be deleted here.

13 – 14. Substantive. 11.2.1.2

Comment: Provide documentation indicating compliance with the VOC content requirements or a certification by a third-party testing organization including, but not limited to, one of the following:
UL EcoLogo – UL Environment
UL 2762 Sustainability for Adhesives

Reason: Certification is not used to demonstrate compliance with VOC content regulations. In order to sell such products in the US, the manufacturer must declare the VOC content on product labels and on technical data sheets. Measurements may be conducted in-house by manufacturers.
Listed programs are not testing organizations but rather product labeling programs and should be deleted here.

Proposed Response: Accept with Modification 13 – 3 and 13 – 14. “...VOC content requirements. Such documentation could include manufacturer declarations or certification by a...” These are tools to help users of the standard show compliance with criteria.

Subcommittee Vote: Unanimously in favor.

MOTION: The motion was made and seconded to accept the comment with the proposed modification.
Discussion took place on the motion:
• It was suggested that the language should read “can” instead of “could.”

AMENDEMENT: The amendment was made and seconded to change “could” to “can”. There was opposition to the amendment.
Discussion took place on the amendment:
• The suggestion was made to change “Could/Can” to “includes”. Another suggestion was made to use the word “may” but the speaker felt “includes” was a better solution.
The Amendment was Withdrawn with no opposition.

Amendment: The amendment was made and seconded to strike the word “could” and replace with “includes”. There were none opposed to the amendment.
VOTE: the amended motion carried with 21 in favor, 2 opposed, and none abstained.
Opposed: Don Horn, Susan Gitlin
None Abstained

- **13 – 11. Substantive. Table 11.2.1.2**
  - **Comment:** Two points are earned where 70% of products by volume comply with VOC emissions criteria. To determine acceptability of the emissions results, VOC building concentrations are estimated for the Standard Private Office Scenario in CDPH Standard Method V1.1, Tables 4-4 and 4-5.
  - **Reason:** It is essential to specify the modeling scenario for determining the acceptance of VOC emissions from interior paints and coatings.

- **13 – 13. Substantive. 11.2.1.2**
  - **Comment:** VOC emissions shall be determined by a third-party laboratory that is accredited to ISO/IEC 17025 with the specified test method listed in the scope of its accreditation. VOC emissions results are determined by the California Department of Public Health’s...
  - **Reason:** VOC emissions must be determined by third-party laboratories that are accredited under the internationally accepted quality standard ISO/IEC 17025. The method must be listed in the laboratory’s scope of accreditation. The methods are relatively complex and QA/QC requirements must be met.

- **13 – 15. Substantive. 11.2.1.2**
  - **Comment:** VOC emissions shall be determined by a third-party laboratory that is accredited to ISO/IEC 17025 with the specified test method listed in the scope of its accreditation. VOC emissions results are determined by either the California Department of Public Health...
  - **Reason:** VOC emissions must be determined by third-party laboratories that are accredited under the internationally accepted quality standard ISO/IEC 17025. The method must be listed in the laboratory’s scope of accreditation.
  - **Proposed Response:** Accept 13 – 11, 13 – 13, and 13 – 15 as modified. Deleted the sentence where it was originally placed, but this is still a valid requirement. “Provide documentation indicating compliance with the VOC content-emission requirements as stated in the Standard Private Office Scenario in CDPH Standard Method V1.1 Tables 4.4 and 4.5 and are compared to the maximum allowable concentrations in CDPH Standard Method V1.1, Table 4.1. does not exceed the maximum allowable concentrations or a certification by a certification body accredited to ISO 17065 and with relevant certification program in the scope of its accreditation. Certification programs include but are not limited to, one of the following:”
  - **Subcommittee Vote:** Unanimously in favor

MOTION: The motion was made and seconded to accept the comment as modified using the proposed response. The motion carried with 21 in favor, none opposed, and 2 abstained.
None Opposed
Abstained: Jeff Bradley, John Koeller

- **13 – 9. Substantive. 11.2.1.2**
  - **Comment:** Certified products meet the VOC content and emissions criteria.
Reason: Statement is not needed and is misleading. The two bullets for award of points provide separate credit for VOC emissions and VOC content. Certification is not a requirement to earn points.

Proposed Response: Accept

Subcommittee Vote: Unanimously in favor

MOTION: The motion was made and seconded to Accept the comment. The motion carried with 20 in favor, none opposed, and none abstained.

None Opposed
None Abstained

WATER

9 – 5. Substantive 5

Comment: Make-up Water Definition: The dilution caused by this additional water mitigates the increasing concentrations of undesirable analytes such as salts that occurs when water is evaporated.

Reason: Unless process water is treated before use to precipitate and filter water, any non-evaporative components in the process water will continue to build up in the system.

Proposed Response: Accept. It is more appropriate to end the definition after the first sentence of what is currently written.

Subcommittee Vote: 6 in favor, none opposed, none abstained

MOTION: The motion was made and seconded to accept proposed response.

VOTE: the motion carried with 22 in favor, none opposed, and none abstained.

None Opposed
None Abstained

54 – 1. Substantive 5

Comment: Potable Water: Water suitable for drinking, for purposes of this protocol water from public water systems or sources explicitly approved for drinking by the local agency of jurisdiction are deemed potable.

Reason: The source of the water has little to do with the term ‘potable’. Natural sources are frequently contaminated with naturally occurring microbes and inorganic chemicals. Federal drinking water quality standards include minimum treatment requirements and ongoing compliance monitoring.

Proposed Response: Accept as modified. Replace with: “Water that is satisfactory for drinking, culinary, and domestic purposes and that meets the requirements of the Authority Having Jurisdiction.” The committee agrees with the commenter’s reasoning that the source of the water is not appropriate for actually defining potable water. The modification more explicitly refers to the AHJ and completely eliminates source.

Subcommittee Vote: 6 in favor, none opposed, none abstained

MOTION: The motion was made and seconded to accept with the proposed modification.

Discussion took place on the motion:

Clarification was requested on the meaning of domestic uses and whether it includes swimming pools. It was explained that domestic uses includes all indoor uses, swimming pools would not necessarily be included. It would depend on the source of water for swimming pool.

VOTE: the motion carried with 18 in favor, none opposed, and none abstained.
• **36 – 2. Substantive. 9**
  o **Comment:** Increase weighting of cooling tower and boiler categories
  o **Reason:** Water-based heating and cooling (where present) can use drastically more water than domestic fixtures. Categories should be weighted on their potential total impact on water consumption, and heating and cooling have a much larger potential to use excessive water than modern domestic fixtures.
  o **Proposed Response:** Accept. Points will be allocated later on.
  o **Subcommittee Vote:** 5 in favor, none opposed, none abstained

**MOTION:** The motion was made and seconded to accept proposed response.

Discussion took place on the motion:

- It was stated that the point quantities should be addressed later on.
- It was clarified that the points will be reallocated from within the Water Assessment Area once the content of the criteria have been revised and approved.

**AMENDEMENT:** The amendment was made and seconded to Accept in Principle. Points will be reallocated within the water section.

One Opposed. Points were awarded to Water based on no prerequisites for that Section.

Discussion that took place on Amendment:

- The opinion was stated that the response should not specify that reallocation will be within the Water Section. It was stated that perhaps points would be reallocated between assessment areas based on previous votes. It was stated that changing the weighting of points is different from reallocation.
- A question was raised whether this comment requires a response from the Consensus Body today. It was clarified that while it wasn’t required and could be postponed there was already a motion on the floor needing to be resolves. No motions were made to postpone the vote to a future meeting.
- Clarification on the status on the complaint of 9.1 was requested. The secretariat clarified that the concerns raised are being addressed according to GBI procedures. (Note: there is no appeals panel at this time.)

**VOTE:** the amendment carried with 11 in favor, 6 opposed, and 6 abstained.

Opposed: Greg Johnson, Gord Shymko, Jeff Bradley, Nicole Dovel-Moore, Don Horn, Susan Gitlin
Abstained: Bill Carroll, Gregg Bergmiller, Jane Rohde, Bill Freeman, Chris Dixon, Paul Bertram

**VOTE:** The amended motion carried with 13 in favor, 4 opposed, and 5 abstained.

Opposed: Nicole Dovel-Moore, Chris Dixon, Jeff Bradley, Gord Shymko
Abstained: Bill Carroll, Gregg Bergmiller, Jane Rohde, Bill Freeman, Greg Johnson.

• **45 – 1. General/Substantive. 9**
  o **Comment:** The GBI Standard should include minimum flow/flush rate standards for common indoor fixtures.
  o **Reason:** The GBI Standard needs to have minimum standards for indoor fixtures in order to be considered credible. The absence of such requirements is conspicuous and may hinder the credibility of the program.
While allowing designers and engineers flexibility to find uncommon paths to efficiency is often desirable, there are appropriate circumstances to define minimum performance standards. Water use is quite different than energy use. First, in most cases there are rarely, if ever, multiple paths to efficiency for indoor water fixtures, this is very different from energy. While there are many ways to efficiently light an interior space. (LEDs, Fluorescents, supplemental daylighting, etc.), there is only one practical way to remove human waste from a building and that is by way of a toilet. Some may contend that fixtures may not need to limit use if they utilize alternative water sources, but that creates the same dilemma. Water from all sources needs to be used efficiently. The water efficiency community will discredit any program that promotes or allows wasteful use of water simply based upon the quality or source of the water (i.e. salt water, rainwater, graywater, etc.).

Another reason water use is fundamentally different than energy use indoors is that energy is consumed, water is not. Energy is typically converted to either light or heat and essentially lost. As such, once it’s used its waste product has relatively little value. Water, on the other hand, is not consumed indoors, it merely changes quality through use.

I applaud the Standard’s increased emphases on the use of alternative water sources to reduce dependence on potable supplies. But that doesn’t mean that non-potable water is less valuable (indeed, it can sometimes be the most costly in terms of infrastructure and energy input). All water is inherently of high value and may ultimately be reclaimed after reaching the sanitary sewer system. Using a non-potable water source is not a justification for using more water. In fact, it’s the best reason for using a high efficiency fixture.

Part of the appeal of the GBI Standard and Green Globes is its ability to be flexible and that is recognized, but with respect to water efficiency, it is simply archaic and not reasonable at this juncture to put forth a standard that does not contain common minimum standards for indoor fixtures. This needs to be rectified in the next draft.

- Proposed Response: Accept as Noted
- Subcommittee Vote: 5 in favor, none opposed, none abstained

MOTION: The motion was made and seconded to accept as noted.

Discussion took place on the motion:

- It was stated that the commenter is looking for a minimum fixture for water fixtures. A question was raised regarding where are these included. It was stated that these are included in 9.1

MOTION: Kent moves to postpone discussion on this comment until discussion of other 9.1 comments.

No objections.

New Business
Secretariat Assistant, Emily Randolph gave a report on the overall progress the Consensus Body has made in reviewing the comments for each assessment area:

- Project Management: 71% complete
- Site: 55% complete
- Energy: 96% complete
- Water: 62% complete
Meeting #14 Minutes
During Meeting #15 a motion carried to correct some editorial errors to reflect the discussion on Section 9.1 chronologically.

MOTION: The motion was made and seconded to approve the corrected Meeting#14 minutes.

Discussion on the motion:
• It was stated that what is documented does not reflect one member’s recollection.
• It was clarified that while calls are usually recorded, Staff forgot to start recording Meeting #14 at the beginning of the call and the contested part of the minutes was not recorded. There was clarification that Meeting #14 was not recorded.

MOTION: The motion was made and seconded to table this until the next meeting. There was no opposition to the motion.
The motion carried. The approval of the Meeting #14 minutes will be added to the June 6th meeting agenda.

Review of Schedule:
• CB Meeting#17: Monday, June 6th from 1:00 PM to 3:00 PM ET
• CB Meeting#18: Wednesday June 22nd from 1:00 PM to 3:00 PM ET
  • A question was raised about how long it will take to finish responses to all comments based on percentage complete. It was explained that it is tough to estimate based on each comment because some comments require more discussion than others.
  • One member asked if Green Globes rating system is developed in parallel to the ANSI review process how long it would be before the rating system could be used. It was explained that we are behind the schedule that was presented at the in-person meeting but the pilot program is still expected to occur concurrently with the second public comment period and we are working to ensure that GreenGlobes will be updated as soon as possible upon the completion of the revision process.

• A request was made by a member to the Water Subcommittee to provide the Consensus Body with some background and technical information to allow informed votes. The member stated they see what happens when not enough water moves through a system and the problems this creates. If water use is cut back flushing becomes a problem in addition to allowing chemical buildup in pipes.

MOTION: A motion was made, seconded and unanimously carried to adjourn the meeting at 4:05 PM ET.