

## Green Chemistry Education Project Group Call

December 20, 2011

*Present: Monica Becker, Monica Becker & Associates Sustainability Consultants; Amy Cannon, Beyond Benign; Shari Franjevic, Clean Production Action; Rich Helling, The Dow Chemical Company; Ann Lee-Jeffs, Johnson and Johnson; Brian Penttila, Pacific Northwest Pollution Prevention Resource Center (PPRC); Beth Rattner, Cradle to Cradle Products Innovation Institute; Phyllis Strong, Minnesota Pollution Control Agency; Homer Swei, Johnson & Johnson; Joel Tickner, Lowell Center for Sustainable Production; Howard Williams, Construction Specialties*

### **Discussion**

- Overview of the green chemistry commitment: It is a unifying method with chemistry faculty
- Will start with chemistry departments but then chemical engineering and material science
- Focus on student learning tiers. Students move up as they continue to do more
- Demand from industry is a key leverage point for the commitment to work
- Having a letter that has a perspective from industry, what you would like to see from students, which is ideal for what we would like to see to support GC commitment. This could also be used to leverage American Chemical Society which accredits chemistry degree. Currently the accreditation has no mention of GC.

Questions about the GC3 policy statement on GC education.

- Tone right?
- Skill sets missing?
- Approach?
- Missing Elements?
- Do the three tiers work?

Comments from those on the call:

- Format is good and it is important that engineering principles were mentioned. Continuing education and training should be included.
- The bullets on the second page: understanding of performance and then ends with industry. How would a student know the performance aspects. "Appreciation of" may be better wording. Continuing education, maybe sustainability could be broader.
- Concept of familiarizing students with tools is important – for alternatives assessment, life cycle assessment, etc.
- The statement on continuing education is critical. The main point is the statement from whoever is signing is it that this is good for our employees to have these skills.

- The statement was written to include all sorts of higher education institutions. If this isn't clear some edits should be made. This could apply to community colleges that have both technical and non-technical programs. It is important to not exclude community colleges.
- A key question is whether the statement should address both chemistry/engineering and non chemistry majors. Is it better to start with the chemistry/science majors and then add in non-science majors at a later point? With the position of the GC3, it may be better to look at it from a broader, global and societal position.
- In the end, it will be executive level people in firms to sign the statement, so would it be more effective for those signers for the statement to be broader or more focused on science majors? As a policy statement rather than a letter, broader may be better.
- Any way to accelerate awareness? Interview from Forbes as follow up to their piece on Green Chemistry to open dialogue that way? Also, it would be useful to send to universities where companies tend to draw most of their talent.

Next steps:

- There was general agreement that the statement should be kept broad – not just a chemistry/science policy, including the continuing education piece.
- By January 13, provide any additional comments on the statement to integrate them.
- By January 13, check with management in firms to determine whether there are any points (particularly commitments in the statement) that would make it difficult for a company to sign on and adjust statement accordingly.
- By late January a smaller working group will finalize the piece and develop an outreach plan. Next call end of January.

**Next Call Date:** Tuesday, January 24, 2012 at 2pm Eastern/ 11am Pacific