ASTM and the RIC System

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WHERE ARE WE?

Background

- SPI developed the original RIC system in 1988 to encourage plastics recycling efforts by identifying the six most common packaging resins found in the municipal waste stream
- Unfortunately, the details around how the RICs would accomplish this goal were never quite worked out
- Moreover, the RICs were never intended to suggest that all items marked with the Codes are collected for recycling, and they were never intended to promote the selection or de-selection of packaging materials

Current Status

- In 2008, SPI asked ASTM to take over the RIC system
- In August 2010, ASTM D7611 was published, which essentially replicates the old SPI system
- However, there is still much room for improvement
- Section D20.95.01 is now discussing modifications
- Any modifications must also be compatible with the “State” RICs
- There are many different opinions

HOW ARE THE CODES USED?

…Generic Material Markings?

- The RICs identify a few generic resin families and are adequate to quantify the relative amounts of these “resins” in the waste stream
- However, compositions within a given “resin” can be incompatible with each other, causing problems at end of life
- Not all “resin” families currently have Codes
- The Codes are now used for many different reasons, including inappropriate unintended uses by the general public
- Is it possible to adequately describe a “resin” so that it meets all the requirements of all potential users, or should a “resin” only be defined by it’s recyclability?

…Commercial Uses?

- Reclaimers often use the Codes in bale audits to identify contaminants; should the Codes be structured simply to help reclaimers identify potential contaminants in a few limited streams?
- Commercial and industrial recyclers outside of the municipal recycling streams also use the RICs to collect and trade articles; are new numbers or subcodes needed to assist commercial/industrial recycling efforts?
- Should RICs only exist for resins that are currently recycled, or do they exist to help encourage future recycling (municipal or commercial/industrial)?

…Municipal Recycling Education Aids?

- The RICs are commonly used to tell the general public which articles to throw in their recycle tubs
- However, not all articles marked with a Code are wanted by all recyclers
  - PP bottles vs. PP moldings; PET clamshells vs. PET bottles; EPS vs. RPS; etc…
  - Regional differences exist
- “Collection” and “Recycling” are not necessarily the same thing
- Is additional information on the Codes (or a totally new marking) needed to better educate the public?

WHAT'S NEXT?

Modifications Being Discussed

- Removing the Chasing Arrows
- Defining the criteria to grant new Codes and SubCodes
- Adding new RICs for major resins
- Adding subCodes to distinguish among incompatible variants within a common “resin”
- Adding optional descriptions to “7” resins
- Providing clearer definitions of each “resin”

The State RIC “Complication”

- At least 30 States and several foreign countries currently utilize the original SPI “1-7” system for bottles and containers
- Removing the chasing arrows may be illegal
- Adding completely new Codes may be complicated
- We are working with the States to have them adopt the ASTM system, but some States may not
- The ASTM system needs to be compatible

Conclusions

- ASTM Standard D7611 is now published
- It is now being modernized
- Many options for improvement are being considered
- **Your input is needed!!**
- Anyone interested should become a member of ASTM at ***www.astm.org*** and join committee D20, Subcommittee D20.95 and Section D20.95.01