D-34 Newsletter, 2018
This introductory Newsletter will advise all our members of the directions planned for the Waste Management Committee. The Industry is constantly changing in it’s needs for consensus standards as techniques and processes change as a result of both regulatory requirements and scientific advances.
We need for our Committee to reflect these changes in our standard writing and review capabilities.
The following key areas have the Comittees focus for the immediate future and we would welcome input from members with their specific expertise:
# Disposal of lab chemicals & samples with PCB’s
# Treatment process design data for a contaminated site
# Selection and optimization of sampling design
# Testing process source materials, prior to composting and leachates that result from the process
# Development of a terminology guide for composting, municipal solid waste reduction, mulching, biodegradation/mineralization etc.
# Guide for operating a municipal compost program
# Guide for sites that place discards on or into land
# Standard for degradable materials and products
# Standard for operating an anaerobic digestion facility
# Materials for discard into a municipal waste water treatment facility
# Materials for discard into a municipal landfill
# Marine degradability of discarded materials

Meet Teresa Clark, Chairman of D-34

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Teresa is from Mesa AZ is VP Product Development and Sustainability for ENSO Plastics, LLC where she develops sustainable solutions for the materials industry. Teresa has created and taught continuing education courses on accelerated natural bio-remediation of materials in the environment for engineers as well as plastics and biodegradation for schools.
Her ASTM committee involvement spans 8 committees including her chairmanship of D34, and D34.03 on Treatment, Recovery and Reuse.
Teresa is an avid environmentalist with experience in microbiology, chemistry, waste management (landfills, compost and recycling), biodegradation and related fields.
Her goals for D34 are to develop new standards that drive improvement and innovation in how waste is managed; to increase the safety, improve the environmental footprint, enhance collaboration with other industries, and lead the way to sustainable materials management. For many years handling waste has been a reactive industry, Teresa envisions D-34 developing a new era where the concept of waste changes to a proactive management of resources for environmental, societal and fiscal benefit.
D34 Main Committee
D34-90 Executive
Teresa Clark, Chairman

D34-92 Long Range Planning
Rauel Dominguez Chair

D34-94 Terminology
Larry Zintek Chair

D34-95 Symposia & Awards
Brian Anderson Chair

Sub Committees and Sections

D-34.01 Monitoring and Characterization
Andy Garrabrants Chair

D-34.01.01 Planning for Sampling
Harry Boyer Chair

D-34.01.02 Sampling Techniques
Kenna Yarborough Chair

D-34.01.03 Sampling Equipment
Brian Schumacher Chair

D-34.01.04 Waste Leaching Techniques
Andy Garrabrants Chair

D-34.01.05 Screening Methods
John Zimmerman Chair

D-34.01.06 Analytical Methods
Larry Zintek Chair

D-34.03 Treatment, Recovery and Reuse
Teresa Clark Chair

D-34.03.01 Solid Waste Collection and Sortation

D-34.03.02 Thermal and Chemical Treatment

D-34.03.03 Composting and Aerobic Treatment

D-34.03.04 Landfill and Anaerobic Treatment

D-34.03.05 Material Recycling and Reuse

D-34.03.06 Liquid Waste and Waste Water

D-34.03.07 Uncontrolled Waste

Teresa announced the proposed sections at the October Committee meeting, Chairs for the sections are currently being appointed and will be announced soon. Discussion ensued regarding current D34.03 standards that may not fit the proposed sections and that there may also be too many. Teresa offered to review all existing standards and open work items to consider how scopes could be combined to reduce the number of sections.
Glancing at the clock you realize that your lunch break is nearly over. You grab the half eaten remnants, wrappers and plastics sitting in front of you; and head towards the exit, dumping it all into the disposal can. A fleeting thought crosses your mind- “this is a lot of trash!”, but that thought is quickly replaced by the daily work grind, your pending projects and the refreshing drink at the end of the day.

This ritual is repeated by millions of people every day, each week, year after year. Most never take the time to consider the journey of their waste and those who handle it. The amount of waste produced is staggering, and managing that waste is no simple task. When the waste is not managed, the results can be horrendous—oceans filled with plastics that do not degenerate, rivers that are toxic, disease, pollution of the air and land, horrid smells, and mountains of trash. Consider the current waste crisis in India and one quickly gains an appreciation for the modern waste management practices in developed countries.

So how does an organization or individual take an active role in creating a clean and sustainable waste processing system? The first step as with any problem is to assess the current situation.

In ASTM’s D34 Committee on Waste Management, we are building this foundation through a classification standard to define different types of management for organic wastes.

For instance is your local yard waste going to an industrial composting system or is it a mulch process? If you want to include compostable plastics, what type of conditions should that composter maintain? Is your local landfill really a landfill, or is it a bioreactor or even just a dump? And what about vermicompost and anaerobic digestion?

Even more complex is trying to design products to integrate effectively into differing waste management scenarios. Until it is clearly understood what the conditions and process requirements are for the discard sites and until we all use the same language, it is nearly impossible to move forward effectively.

ASTM Committee D34 is currently drafting a classification system that is intended to provide a common language platform for the industry, regulators and sustainability experts to work in unison to effectively design, discard and manage various material types in the most valuable method available.

So next time you head to that trash can; think a bit longer about the implications and then join ASTM and Committee D34 on Waste Management to be an active part of our future............

Teresa Clark, Chairman ASTM D34.

**BIOMASS TO BIOCHAR??**

Since prehistoric times in all continents man has produced charcoal for heating and cooking. Today we have a renewed interest in this technique to produce a compostable material from agricultural and forestry produced biomass including but not limited to woody materials.

Charcoal is produced in a pit, enclosed kiln or burn pile or container where the air flow can be restricted or controlled. Biomass similarly treated by a controlled burn that releases the moisture and then the volatile gases to burn in the flame. Interruption at this point retains a material that can be reused, we call it biochar which is used as a soil amendment and bulking agent in agriculture and a feed additive for ruminants that will reduce enteric methane production. When used as a soil amendment it can sorb and make bio-unavailable a range of toxic materials. Work item WK 65350 Conducting Conservation Burns of Biomass now exists. D34.03.02 on Thermal and Chemical Treatment is responsible.
Auld Tymers of ASTM Committee D.34
L-R Andy Garrabrants, Secretary & Chair
D34.01, D34.01.04 Brian Schumacher, Chair
D34.01.03, Brian Anderson, Chair D34.95, Harry
Boyer AOM, Chair D34.01.01, James Frampton.
Total 112 years service to Committee D34

Newer members of ASTM Committee D34
L-R Larry Zintek, Chair of D34.94, D34.01.06,
Raul Dominguez, Vice Chair, D34, Chair D34.92,
Michelle Riggs.

ASTM Award of Merit Presented to Harry Boyer, April 2018
The award recognized meritorious service to Committee D34
and other committees over his 27 years of ASTM Membership.
Harry is now elected a Fellow of ASTM and may
assume the AOM title.
Pictured with Harry is Teresa Clark, D34 Chair with
Andy Garrabrants, Secretary and Past Chair of D34