FOR IMMEDIATE RELEASE

ARTA-IAHTM LIFE CYCLE ANALYSIS ON ISOLATION GOWNS GIVES THE ADVANTAGE TO REUSABLES

LCA research finds that reusable isolation gowns provide a significant improvement in energy, environmental footprint, water, and energy-associated emissions. In addition, reusable gowns offer a 95% reduction in waste stream.

MISSION, KS, Jan. 4, 2018 — The American Reusable Textile Association (ARTA), the International Association for Healthcare Management (IAHTM) and sponsors have announced the completion of life cycle research comparing the life cycles of reusable versus disposable isolation gowns. The study was conducted by Environmental Clarity, Inc., on behalf of the two organizations.

"The results of the isolation gown LCA support the conclusions from six other reusable/disposable studies that showed reusables provide a significant improvement in energy, environmental footprint, water, and energy-associated emissions," said Michael Overcash, PhD, of Environmental Clarity.

About the Study

Disposable and reusable isolation gowns were studied from their inception as raw materials in the earth to manufacture of the coverall product, to use/reuse, then to final end-of-life disposition. The scope and the results emphasize transparent, science-based life cycle analysis. An abstract on the study is available at ***www.ARTA1.com***.

The study found that choosing reusable isolation gowns instead of disposable alternatives decreases the environmental footprint by:

- 28% lower natural resource energy consumption,
- 30% lower greenhouse gas emissions (measured as CO2 eq emissions),
- 41% lower total water consumed (blue water[1]),
- 93-99% lower solid waste generation at healthcare facility.
    a. End users can count these improvements as a credit toward improving their sustainability programs.

In this study, an isolation gown was defined as a single-piece, size extra-large (XL) or one-size-fits-most, long-sleeve, tie-up garment. The functional unit, or basis of comparison, was 1,000 isolation gown uses in a healthcare setting. For the reusable gowns, this was 16.7 new gowns each used for 60 cycles, while for the disposable gowns this was 1,000 new gowns. Two market representative ANSI/AAAMI Level 1 isolation gowns were investigated: a reusable polyester gown and a disposable nonwoven gown. The representative reusable gown weighed 240 g (8.5 oz.) and was composed primarily of woven polyethylene terephthalate (PET) fabric. The representative disposable gown weighed 63 g (2.2 oz.) and was composed primarily of nonwoven spunbond-meltblown-spunbond (SMS) polypropylene fabric.

---

[1] *Blue water represents water that is used and not returned to the source, and thus represents depletion of a fresh water source.*

ARTA-IAHTM LCA Committee

The study was organized by the LCA Committee, which contracted with the independent research firm Environmental Clarity. The research team includes Overcash, Eric Vozzola and Evan Griffing. The LCA Committee members include:

- **Myles Noel** of International Healthcare Association for Textile Management (IAHTM)
- **Duane Houvener** of American Dawn
- **Janice Larson** of Encompass
- **Robert Long** of European Textile Services Association (ETSA)
- **Scott Delin** of Fashion Seal
- **Shelley Petrovskis** of Lac Mac Limited
- **Brendan O'Neill** of London Hospital Linen Service and ARTA President
- **Dan Sanchez** of Medline
- **Joe Ricci** of TRSA

ARTA was founded in 1982 with the mission to create greater awareness and appreciation for reusable textiles. Members represent all facets of the textile services industry — from manufacturers, suppliers, and distributors to profit and not-for-profit laundry operators, as well as allied associations. For more information: *www.ARTA1.com.*

IAHTM is a network of senior-level experts in healthcare textile management who regularly interact to share ideas and information for the mutual and continuing success of their respective laundry cooperatives. IAHTM is a nonprofit membership organization that exists specifically for healthcare laundry cooperatives. *www.IAHTM.com*.

MEDIA CONTACT: Nancy Jenkins, *njenkins@ARTA1.com*

###

[1] *Blue water represents water that is used and not returned to the source, and thus represents depletion of a fresh water source.*