

## P2 Backgrounder

Pollution prevention as reported in the Toxics Release Inventory (TRI)

# Pollution Prevention accomplishments at Schick Manufacturing in Verona, Virginia

# Management of Trichloroethylene at Facility SCHICK MANUFACTURING INC 4,000,000 lbs 3,000,000 lbs 2,000,000 lbs 1,000,000 lbs O lbs 2004 2005 2006 2007 2008 2009 2010 2011 2012 Recycled Energy Recovery Treated Released

Schick reduced TCE wastes by 55% between 2011 & 2012 (graph from P2 Search Tool at epa.gov/tri/p2)

### SCHICK'S PLANT

Razor blades for personal, professional and medical use.

# POLLUTION PREVENTION

Reduced trichloroethylene waste in 2012, and has since achieved complete elimination.

### **P2 BENEFITS**

- \* Elimination of TCE risks
- \* Lower costs for materials, energy and waste disposal

reductions of trichloroethylene (TCE) waste generation in its 2012 Toxics Release Inventory (TRI) report, and indicated that use of TCE was expected to go to zero by October 2013.

Schick reported large

The company provided some additional information on its P2 activities in response to a request from EPA's Pollution Prevention Program.

**About the facility:** Schick's Verona, Virginia facility (formerly American Safety Razor) manufactures a wide variety of blades and tools from steel stock, for personal care, professional use, and specialty categories such as medical blades.

**TCE:** Trichloroethylene was used as a cleaning solvent in both liquid and vapor cleaning/degreasing operations. The bulk of the TCE was recycled onsite through carbon absorption and distillation; some wastes were generated and shipped offsite as hazardous waste.

Why P2?: When Schick acquired the facility in 2010, the company's prior experience with TCE, particularly the potential for contamination and subsequent remediation, combined with other factors – increasing costs (of TCE, waste disposal, and energy needed for distillation), and increased regulatory risk -- made TCE elimination a priority.

P2 measures: The plant installed aqueous "wash boxes" on production lines to replace TCE-based cleaning operations, and also uses an alcoholbased cleaner in vapor degreasing as an effective substitute for TCE. The procedures were rigorously tested to insure equivalent cleaning results, and employees were trained in their operation. Schick's prior experience with these technologies facilitated the adoption at the Verona plant.

**P2 results:** TCE use has been completely eliminated at this plant; the chemical is no longer used in operations and there is no remaining inventory. Although risk reduction was the key driver for these P2 measures, the plant estimates cost reductions of \$250,000 a year from reduced energy, material and hazardous waste disposal costs.