

Trinity Industries, Asheville, North Carolina

Background

The Trinity Industries facility in Asheville, North Carolina, is a metal fabrication plant which produces various steel and aluminum railroad boxcar assemblies for the railroad industry. The fabrication process includes: metal prep cleaning, cutting large pieces of steel and aluminum, sanding, welding, acid bath treatment, and primer coat painting. The finished parts, including: gates for gondolas, wear plates, and box car roof parts, are forwarded to assembly plants in Alabama and Texas.

Waste Reduction Activities

- Eliminated the use of “scouring grit” used to remove the rust that had formed on “wear plates,” which had been stored outside, by storing the wear plates inside the plant or under cover.
- Installed low-flow toilets, sink aerators, and low-flow shower heads to reduce water usage.
- Installed an in-tank filtration system to reduce caustic wastewater.
- Modified the procurement policy to order pallets sized to the materials used. Reduced total pallet usage by 70%.
- Recycled 50 tons of cardboard annually.
- Replaced paint spray guns with HVLP-type guns to reduce paint waste.
- Eliminated the use of waste cleaning solvents.

Waste Reduction Annual Savings

- “Scouring Grit” elimination, (75 tons)
\$3,000 landfill tipping fees saved
- Water usage reduction, (220,000 gpy), \$1,335
- Caustic wastewater reduction, (6,000 gpy)
\$1,200 wastewater cost savings
- Paint waste reduction, (13,200 gpy)
\$14,800 hazardous waste cost savings
- 75 tons of “scouring grit” and 50 tons of cardboard diverted from landfills

Waste Reduction Annual Savings

\$20,335

Water Usage Reduced

220,000 gpy

Waste Diverted from Landfills

125 tons





Waste Reduction Partners

Land-of-Sky Regional Council • Asheville, NC • Phone: 828-251-6622 • Email: wrp@landofsky.org • www.wastereductionpartners.org
Triangle J Council of Governments • Research Triangle Park, NC • Phone: 919-549-0551 • wrp@tjco.gov

WRP Performance Achievements for NC Businesses and Institutions

Since 2000, Waste Reduction Partners' team of retired professionals has provided more than 158,000 hours of "pro bono" technical expertise to businesses, manufacturers, and institutions. This unique team of volunteers is dedicated to achieving a better quality of life for all North Carolinians.

Waste Reduction Partners helps organizations achieve sustainability goals with utility cost saving strategies.

The WRP team conducts on-site assessments and provides consulting services to businesses and public facilities throughout North Carolina. The program focuses on pollution prevention, operating efficiency improvements and cost effectiveness.

WRP services are grant sponsored or supported through technical service contracts to provide assistance to its clients at **no-cost**.

All services are non-regulatory and confidential.

who we are



A team of 65 distinguished retired engineers, scientists, and business professionals with more than 2300 years of experience.

what we offer



On-site efficiency improvement assessments in water and waste reduction, energy management, and pollution prevention.

who we serve



WRP volunteers have helped more than 1300 clients save money through improved energy, water & waste reduction plans.

- o Manufacturing
- o Agriculture
- o Local Governments
- o Non-Profits
- o Businesses
- o K12 Schools & Institutions

\$ 23 Million
Total Utility Cost Savings

717,300
Million BTU Reduced

601 Million Gallons
Water Conserved

210,200
Megawatt Hours Saved

197,600 Tons
Solid Waste Reduced

125,100 Tons
Greenhouse Gas Reduction



Waste Reduction Partners is administered by the Land-of-Sky Regional Council and the Triangle J Council of Governments. WRP is a partnership program of the NC Department of Environment and Natural Resources, with sponsorship, in part, by the NC State Energy Office.

