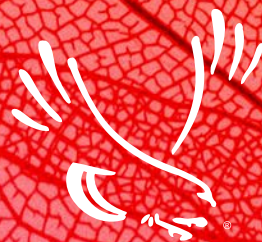


HSSE 2016

Health, Safety, Security, and Environment
Annual Report



brewer science

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Message from the President



For more than thirty years, our corporate vision, Of the People, By the Technology, For the Customer, has directed our business practices at Brewer Science. Our Health, Safety, Security, and Environmental (HSSE) management systems have fulfilled this vision by providing leading programs to sustain and improve the environment in which our company operates. Our mission to continuously improve our global HSSE systems to the benefit of our employees and customers substantiates our commitment and adds unexpected value throughout the world.

Brewer Science is proud of the results our HSSE efforts have had on our internal and external communities. Key outcomes of our improvement programs include:

- Improvements to our Wellness Program, including fall and winter fitness programs, wellness seminars, an on-site exercise room, and the promotion of healthy foods available in the workplace
- Receipt of the “Gold Fit Friendly Award” from the American Heart Association for the fifth straight year
- Community collection of tires, household appliances and electronics, diverting over 51,000 lb. of residential material from landfills
- Continued reuse and recycling of over 99% of our hazardous waste for the fifth straight year
- Recycling of 57 tons of cardboard, paper, batteries, plastic, and bulbs, diverting these items from landfills
- Consistent below-average rate of OSHA® recordable injuries for our industry
- Receipt of the GreenCircle “Zero Waste to Landfill” certification
- Utilization of geothermal technology for use at the new Vichy manufacturing facility
- 1002 days since the last Lost Time Incident
- Yearly Incident Command and Emergency Response training and exercises for employees
- Utilization of the Community Service Leave Policy, enabling employees to serve the community during work hours

These achievements are testaments that the global safety, wellness, and environmental policies we enact educate our employees, improve their well-being, and continue to make Brewer Science an environmentally friendly leader and socially responsible member of the community.

Brewer Science has been externally reporting environmental, safety, and health performance on a yearly basis since 2006. We provide this report to our stakeholders to better communicate the continued importance we place on safety, employee wellness, and environmental and social responsibility and the value our efforts bring to our employees and our community.

We continually seek ways to improve and always welcome your feedback. It is our sincere desire that these efforts will have a positive impact on the overall health, safety, security, and environment of the global communities that we influence. Additional information can be obtained from our website at brewerscience.com/esg.

Dr. Terry Brewer

President and Founder, Brewer Science, Inc.

Why HSSE?

Brewer Science recognizes its responsibility to conserve natural resources while providing safe, secure, and environmentally responsible solutions for customers throughout the world. For this reason, Health, Safety, Security, and Environmental (HSSE) management systems based on the requirements of the ISO® 14001, OHSAS 18001, and ISO® 27002 standards are maintained. A global HSSE Team implements and maintains systems that support the company's HSSE policy and goals. Internal Safety, Security, and Environmental Departments participate with and assist the HSSE Team by educating employees and the local community about improved waste management and HSSE practices.

HSSE Policy

Brewer Science has established and is committed to maintaining health, safety, security, and environmental management systems with the overall objective of preventing pollution of the environment and providing a healthy, safe, and secure workplace. Suppliers, contractors, and customers are encouraged to follow ISO® 14001, OHSAS 18001, and ISO® 27002 standards. These systems will drive continuous improvement through planning, risk assessment and monitoring, corrective action, and management review. Brewer Science will comply with all relevant international, federal, state, and local regulations and other requirements wherever we operate.

HSSE Performance Information

All environmental, health, and safety aspects of Brewer Science processes and products are identified. Objectives and targets that minimize the company's negative impact on these systems are then developed. Management approves the objectives, while the HSSE Team manages the systems to ensure all goals are reached effectively and on time.

OPERATIONAL OUTCOMES

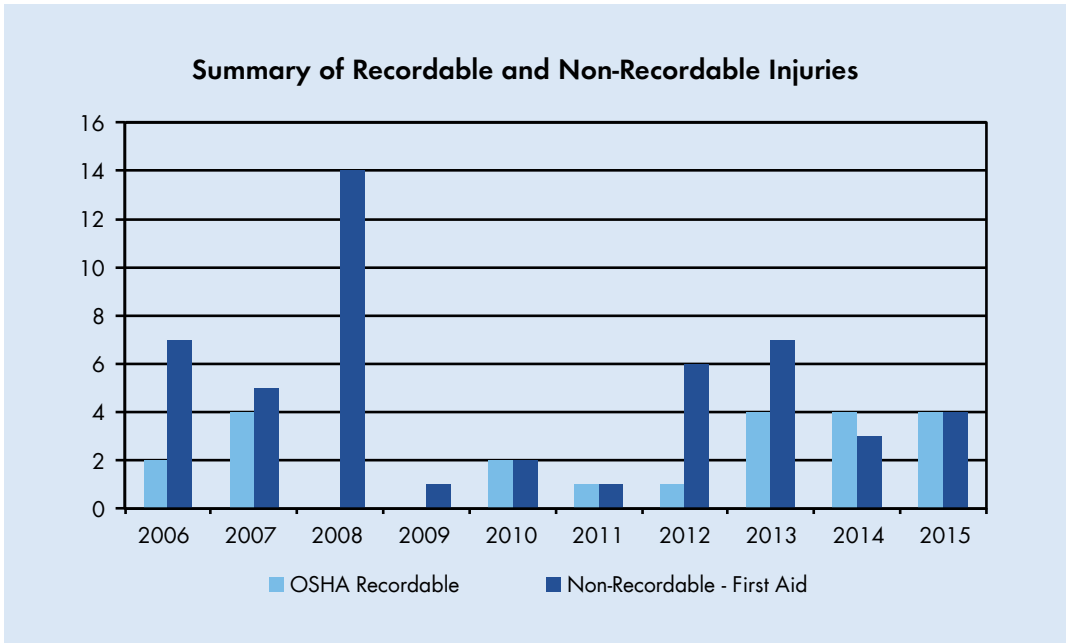
The following specific outcomes have been chosen to minimize environmental, health, safety, and security impacts:

- Received the GreenCircle, LLC "Zero Waste to Landfill" certification
- Reduced the overall occurrences of chemical spills and chemical exposures by 35% from 2014
- Achieved 94% of our Green Program goal
- Reused approximately 100,000 lb. of tank cleaning solvent in 2015

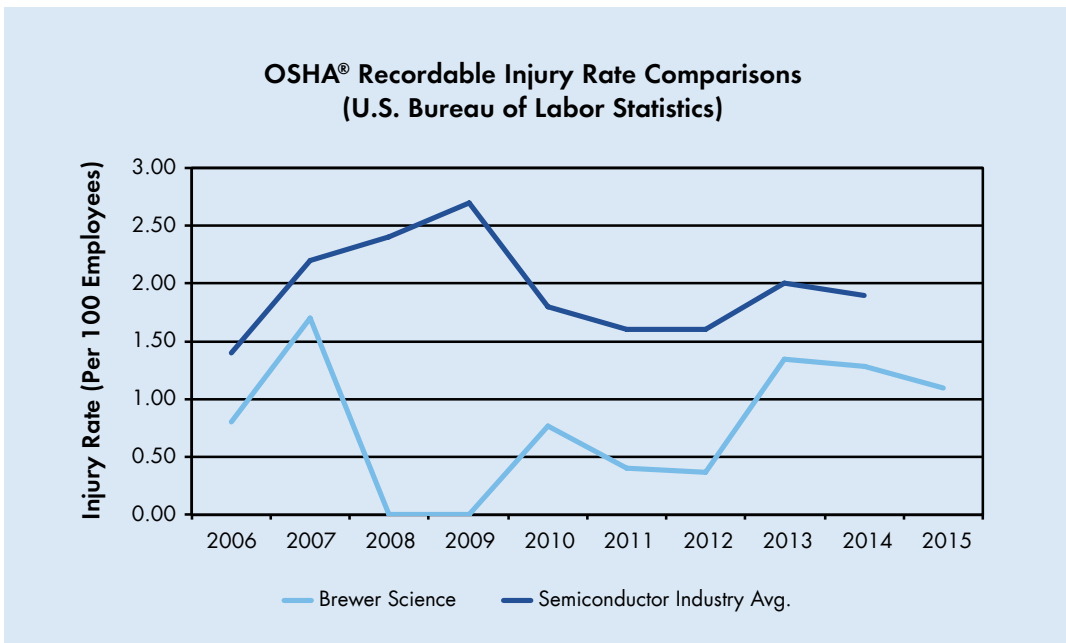
WELLNESS

Healthy employees must be at the helm to carry out the Brewer Science company vision, Of the People, By the Technology, For the Customer. Several wellness programs were provided for employees during 2015.

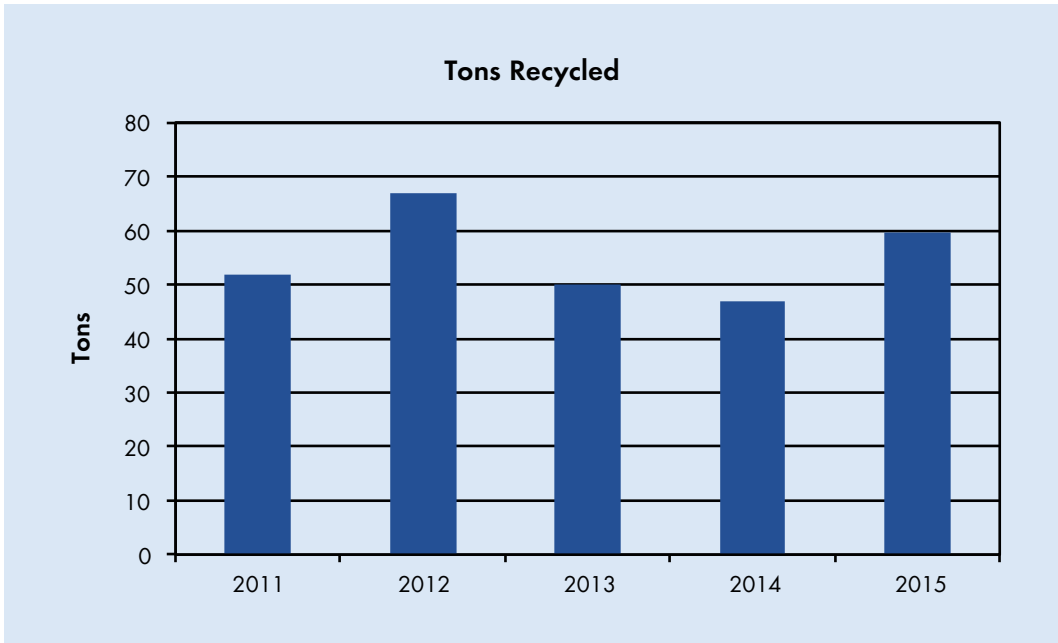
- Fall/winter fitness program
- Smoking cessation program
- Discounts provided to employees at various fitness centers
- Wellness breaks wherein employees are allotted 30 minutes per day of paid time to engage in exercise and physical activity
- On-site fitness room – treadmill, elliptical, weight machine, stationary bikes
- Healthy food options in the vending machines
- On-site yoga classes
- On-site Zumba® classes



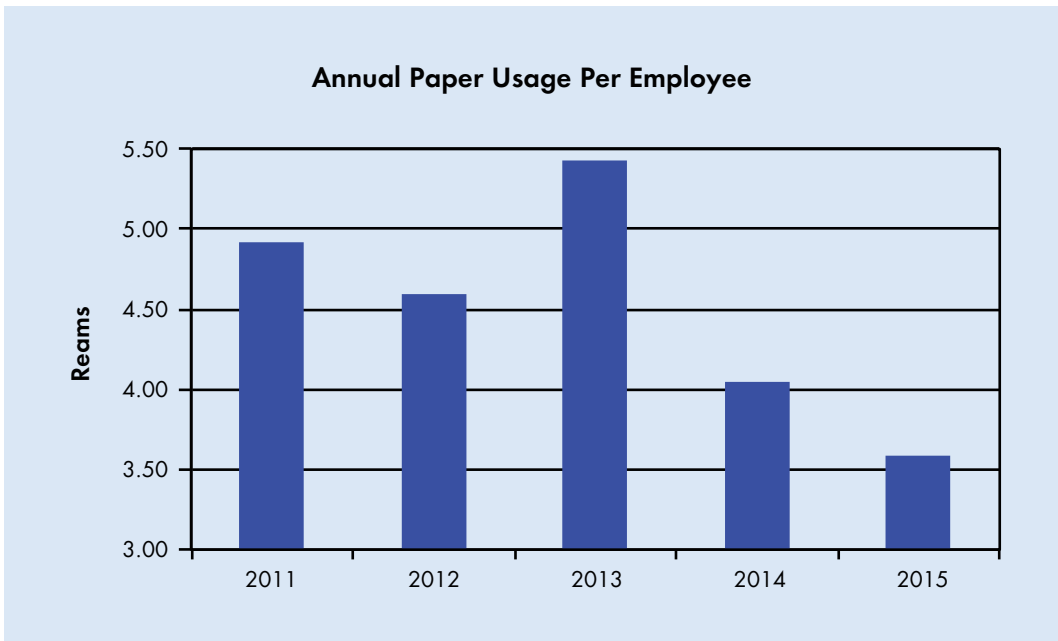
Brewer Science experienced four recordable injuries in 2015.

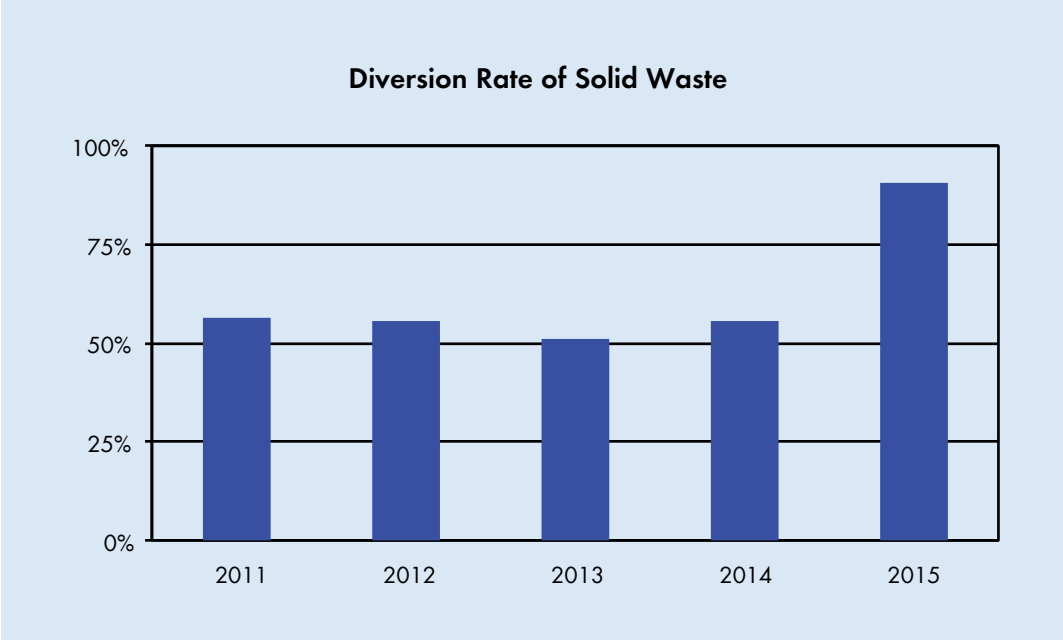


The Brewer Science safety record continues to exceed the semiconductor industry average.

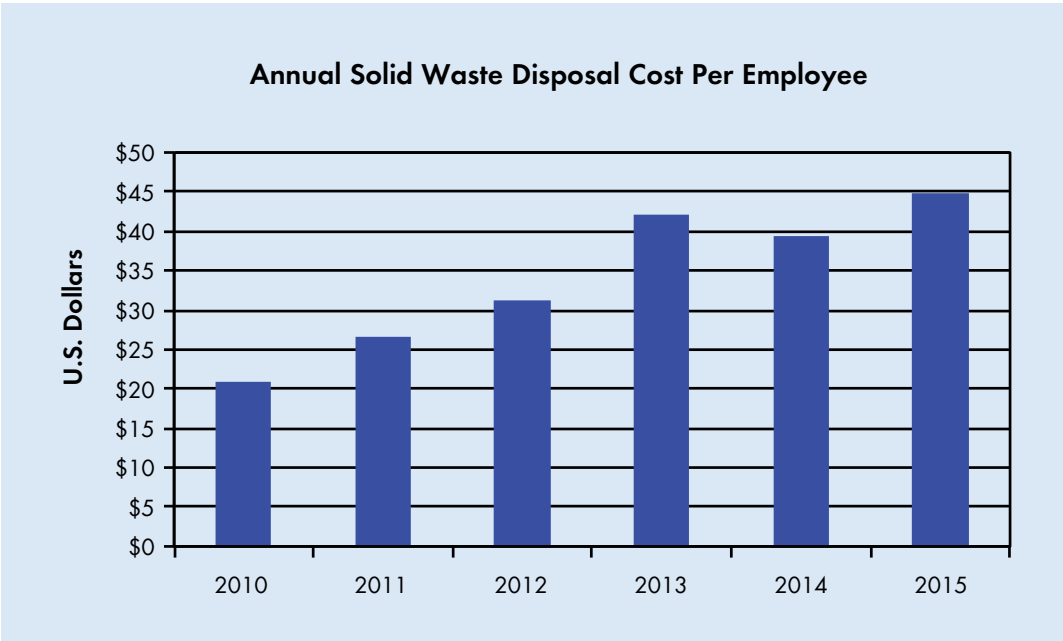


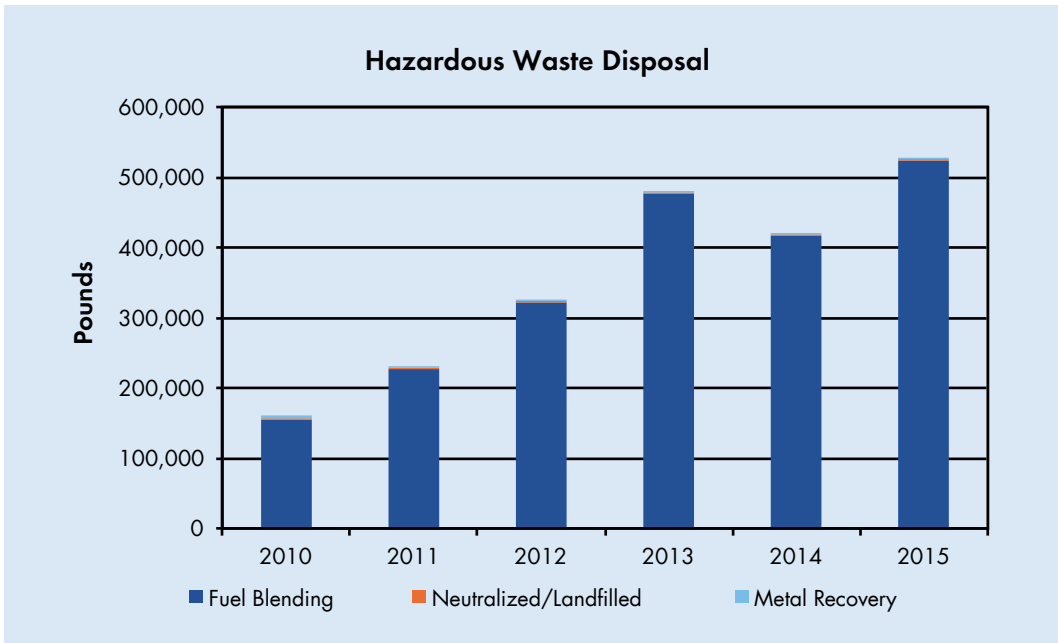
Brewer Science has recycled over 597 tons since its formal recycling program was initiated in 2002. Materials included in these numbers are all types of paper, plastic bags, shrink-wrap, bottles, and containers. The proceeds from recycling aluminum cans, cell phones, and ink-jet cartridges are donated to local non-profit organizations. Batteries, steel drums, and other metals are also recycled. Brewer Science continually looks for ways to utilize recyclable materials.





Implementation of the zero landfill initiative in 2015 led to a substantial increase in the percentage of total solid waste that the company diverted from landfills.

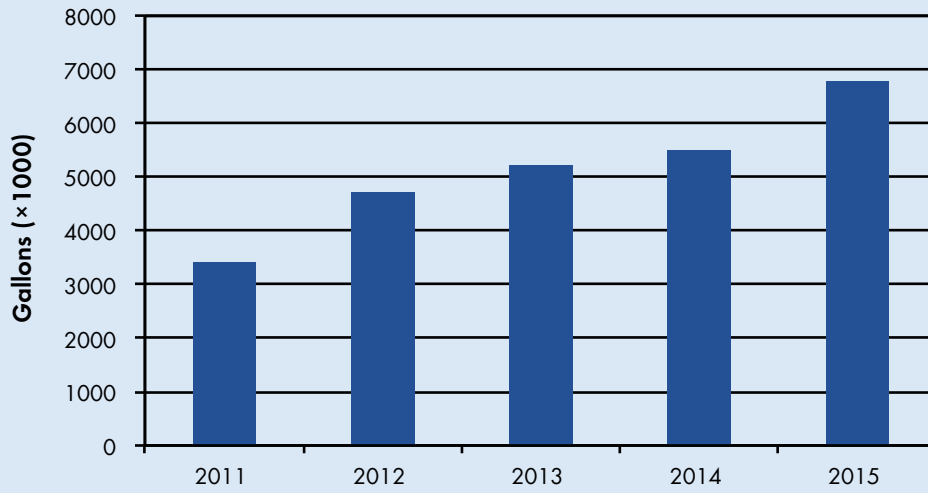




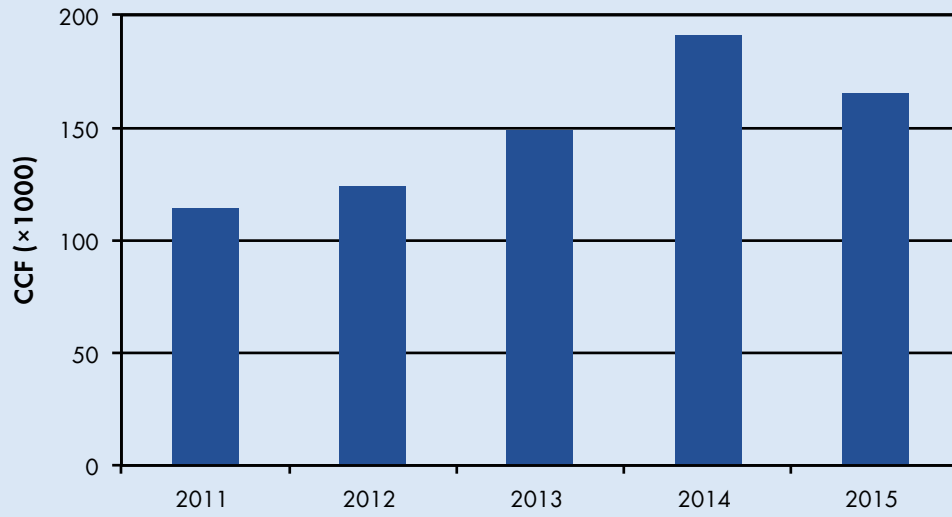
Fuel blending involves processing hazardous waste into fuels derived from liquid and solid waste, which are then used as a secondary fuel source to replace coal and natural gas in cement kilns. This method is safe and effective for recovering the energy value of the waste and helps conserve our planet's finite natural resources.

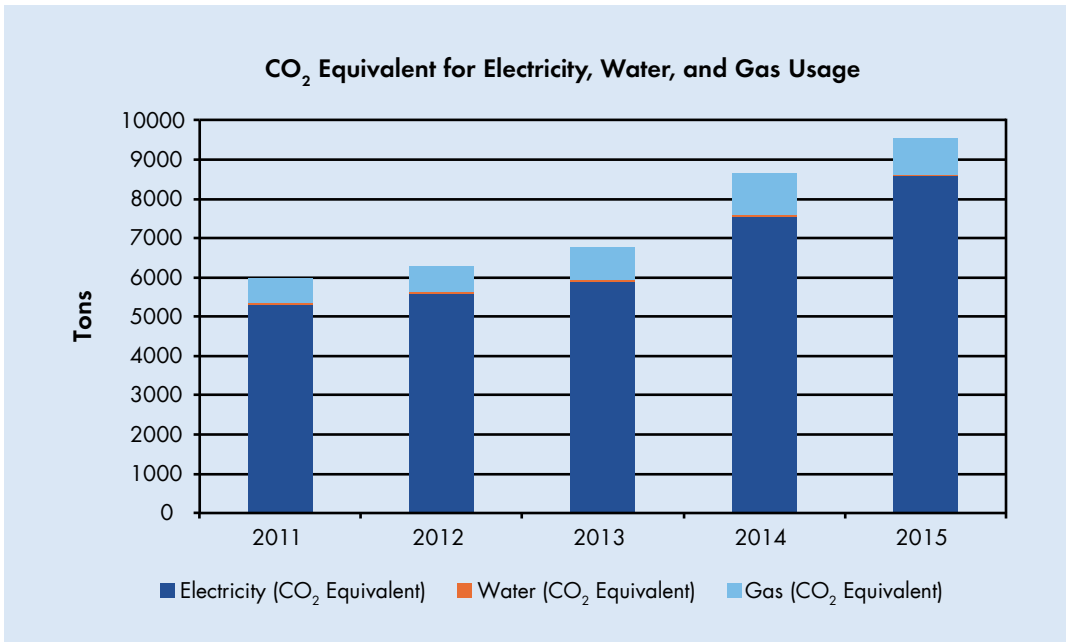
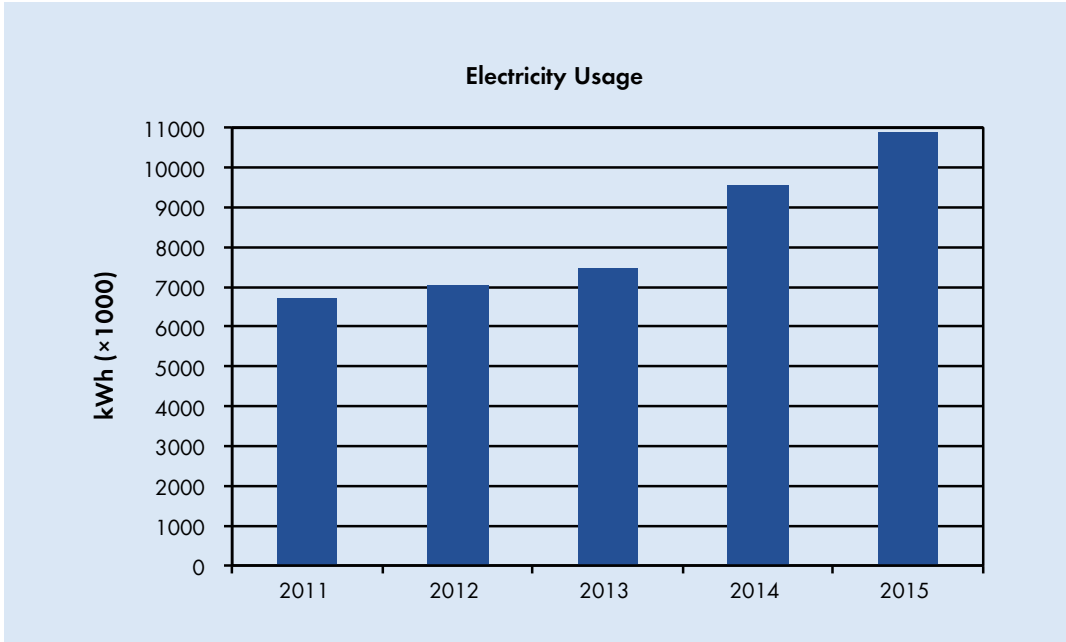
Metal drums are processed as they pass through a container decontamination unit, an oven fueled by natural gas with temperatures above 1500°F. The high temperatures destroy the chemical residues, which produce ash. This ash is tested and blended on-site into an alternative fuel source for cement kilns. Decontaminated drums are then crushed and sent to steel mills for recycling.

Water Usage

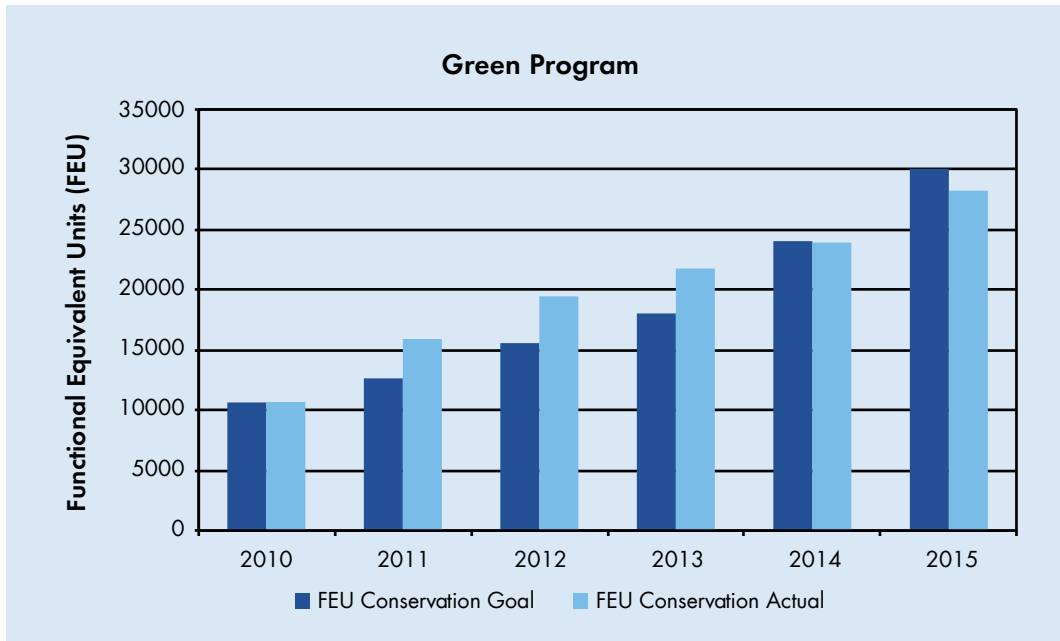


Gas Usage



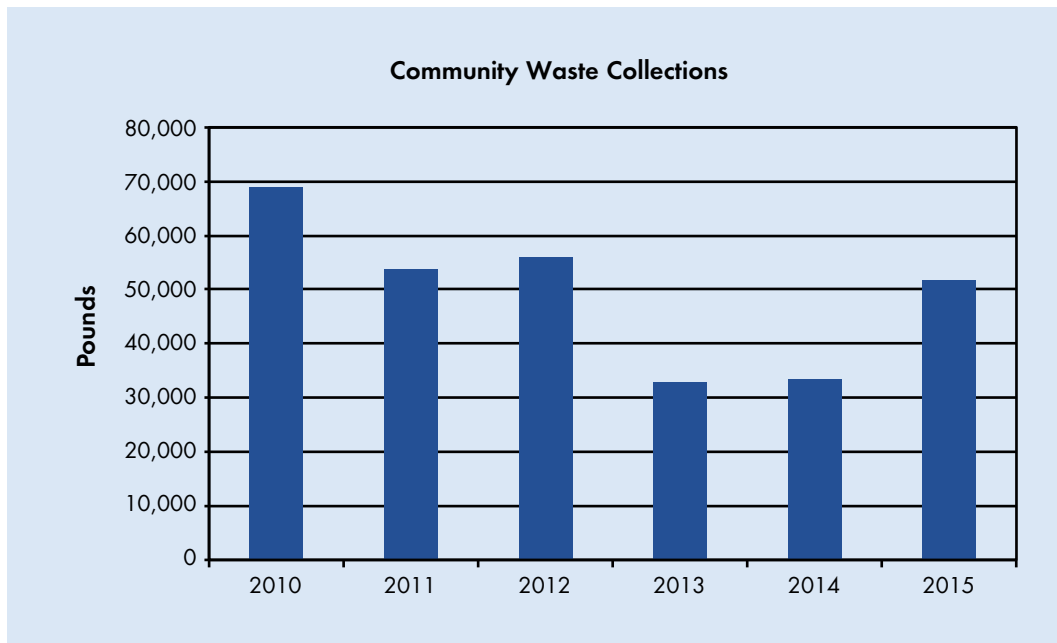


Brewer Science expansions and increased production have increased the overall utility usage year over year; however, our Green Program efforts continue to retrofit existing systems and ensure energy-saving options are implemented with new construction projects. Weather patterns in the summer and winter months also have a large effect on utility usage for gas and electricity.



For 2015, lighting and water unit replacements resulted in the addition of almost 48850 kWh per year of energy conservation and 218,050 gallons of water. To date, the program has resulted in a yearly conservation of 498,400 gallons of water, 308,325 kWh of electricity and 8800 therms of natural gas.

The goal of this project, which began in 2010 and ended in 2015, was to reduce water, electricity, and natural gas use each by 10,000 functional equivalent units (FEU), for a total of 30,000 FEUs. The 30,000 FEUs are equal to 700,000 gallons per year, 250,000 kWh per year, and 10,000 therms per year by the end of 2015. 94% of the goal was achieved. This goal was achieved through the installation of more efficient water and electrical fixtures and insulation projects.



Brewer Science continues its partnership with the community by helping stakeholders properly dispose of waste and adopting the surrounding streets in our industrial park. By working with the City of Rolla, the Ozark Rivers Solid Waste Management District, the Missouri Department of Natural Resources, the Meramec Regional Planning Commission, and the Phelps County Commission, Brewer Science provides area residents with community collections that have enabled Phelps County to properly dispose of almost 811,000 pounds of waste over the past 11 years. This partnership contracted disposal companies and provided volunteers who collected appliances, electronics, and tires from area residents which would have otherwise been disposed of in a landfill. Brewer Science continues to support these efforts.

Training

All personnel are required to be competent when they perform tasks that may impact HSSE issues in the workplace. Competence is defined in terms of appropriate education, training, and/or experience. Training requirements are based upon the specific task requirements of individual job descriptions and/or homogeneous exposure groups as defined in our Hazard Assessment Procedure. Training plans are updated and documented at least annually as part of the HSSE objectives planning process and are summarized in the Corporate Training Matrix. Human Resources maintains these records according to the Training Process.

Below are some of the required HSSE training courses:

- Hazard Communication Annual Refresher
- Hazardous Waste Annual Refresher
- Lockout/Tagout Authorization
- Chemical Hygiene Plan
- Workplace Violence Prevention
- Fire Extinguisher Training
- Flammable and Combustible Liquids Training
- Influencing Security-Compliant Behaviors
- Emergency Response
- Safety Review & Lab Chemical Hygiene Plan
- Hot Work Permits
- Respirator Training
- Electrical Safety
- Gas Cylinder Handling
- Compressed Gas
- Ergonomics
- Manual Handling
- Elevated Work
- Global Harmonized Systems

Awards and Recognition

Brewer Science has received numerous awards in recognition of its voluntary efforts and genuine concern for the environment.

LOCAL

- 2012 – Ozark Rivers Solid Waste Management District: Dedication to the environment in the Ozark Rivers Region
- 2012 – Award of Congratulations from SAFERolla for recognizing the importance of protecting the health of workers and our community. Awarded by the physicians and volunteers who make up the Smoke-Free Air for Everyone coalition.
- 2014 – Safety Council of the Ozarks, Les Reynolds Million Hour Award 2014

STATE

- 2011 – Missouri Association of Manufacturers 2011 Safety Excellence Award for Category V: 400,000 or more hours worked. Brewer Science's performance record exemplifies an outstanding safety program.
- 2013 – Terry Brewer named "One of the 50 Missourians You Should Know" by *Ingram's* magazine
- 2013 – Brewer Science named "Top Workplace" by the *St. Louis Post-Dispatch*
- 2014 – Safety Excellence Award from the Missouri Association of Manufacturers

NATIONAL

- 2005 – National Recycling Coalition: Fred Schmitt Award for Outstanding Corporate Leadership
- 2006 – American Forest & Paper Association®: Business Leadership and Recycling Award
- 2010 – National Safety Council: Million Work Hours Award
- 2010 – National Safety Council: Significant Improvement Award
- 2010 – National Safety Council: Milestone Award
- 2010 – Southwest Area Manufacturers Association: Safety Excellence Award
- 2011 – Travelers Insurance Safety Award for working 1.5 million hours without a lost workday injury
- 2012 – Ozark Rivers Solid Waste Management District: Award in the business category for outstanding multiyear environmental support to the community
- 2011, 2012, 2013, 2014, 2015 – American Heart Association: Gold Fit Friendly Award



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2401 Brewer Drive • Rolla, MO 65401 USA
Phone: +1-573-364-0300 • Fax: +1-573-368-3318

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