

ENVIRONMENTAL, HEALTH & SAFETY REPORT 2009





CONTENTS	I
EHS PERFORMANCE	5
ENVIRONMENTAL INITIATIVES	9
PRODUCTS	<u>11</u>
HEALTH & SAFETY	14

This report is an update of the <u>Tektronix Environmental</u>, <u>Health & Safety Report 2009</u>. The report generally contains data from September 2002 through December 2009 and narrative descriptions of EHS initiatives from January 2008 through December 2009. It was published in April 2010.

If you have any questions or comments regarding this report, contact:

Ken Skinner Senior Manager, Environmental, Health and Safety Tektronix, Inc PO Box 500, M/S 50-EHS Beaverton, Oregon 97077 USA 503-627-2667 E-mail: <u>kenneth.j.skinner@tektronix.com</u> Tektronix has a long history of environmental leadership and stewardship. As a Danaher operating company, we remain committed to preserving and improving the environment for future generations.

Today, our focus is on the responsible and systematic management of our environmental impacts, including tracking and reducing our green house gas (GHG) emissions and the life-cycle impacts of our products.

This EHS Report highlights of some of the specific programs Tektronix has in place to meet that commitment.







Tektronix is committed to conducting its business in an environmentally responsible manner, in compliance with all applicable environmental, health and safety laws, and in a manner that promotes and protects the health and safety of our associates, customers, partners, associates, and members of our local communities worldwide. That commitment includes:

- Integration of sound environmental, health and safety programs, practices and goals into applicable business functions, including purchasing, product design, product testing, manufacturing and product support.
- Designing, operating and maintaining facilities in a manner that minimizes emissions and wastes.
- Responsible use of materials, including, where feasible, the recycling of reusable materials and the purchase of products containing recycled materials.
- Sensitivity to community concerns about environmental, health and safety issues.



ISO-14001 Environmental Management System

Tektronix launched its Environmental Management System program in the late 1990s in order to provide a framework within which Tektronix could ensure an ordered and consistent approach to environmental concerns.

Tektronix achieved its first ISO-14001 certification in January 2003 for its Beaverton facility. We currently have ISO-14001:2004 certifications for all of our major manufacturing facilities. Tektronix leveraged its already welldeveloped quality management system with requirements for EMS certification, saving time and resources and creating an unusually mature system for initial certification.

Achieving ISO-14001 certification is recognition of Tektronix' long history and strong culture of environmental protection and stewardship and is just one more way that Tektronix continues to distinguish itself as a leader in the test and measurement industry and.



A properly implemented EMS should be able to simultaneously lower the cost of environmental

compliance and reduce the risk of non-compliance.

Environmental Aspects

The high tech electronics industry is generally considered to be a "clean industry", and Tektronix operations fall within that category. Nonetheless, in an effort to continually improve our operations, Tektronix identified five aspects of its business as having the most potential to impact the environment and established those aspects as priorities for our EMS for CY 07:

- 1. Utility Consumption
- 2. Employee Commute
- 3. Solid Waste Generation/Disposal
- 4. Facilities Maintenance
- 5. Building Occupancy

ISO-14000 Environmental Goals & Objectives

Tektronix has established goals and objectives for its significant environmental aspects. Some examples are listed below:

- 1. Reduced utility usage/generation rate as normalized to facility square footage.
- Increased solid waste recycling rate to 60%
- 3. Develop alternatives to encourage alternative transportation use.
- 4. Implement the energy savings ideas identified during the Energy Kaizen.

Tektronix continually monitors its environmental performance in numerous areas using a variety of EHS metrics. We implemented an Environmental Management System in the late 1990s and have publicly reported our EHS metrics since 2003. Tektronix, Inc. was acquired by Danaher Corporation in November 2007, since that time we have implemented aspects of the Danaher Business System in our EHS programs to further improve performance and efficiency. The following are some of the key indicators we use to monitor and manage our EHS performance.¹

CHEMICAL USE:

The evolution of our manufacturing processes, combined with our continuing business model refinements, has resulted in significant reductions in the volume of chemicals, water and other resources used by our manufacturing operations. We continue to look for opportunities to reduce chemical and other resource consumption.

Toxic Chemical Releases (TRI)



Chemical Use



¹ Unless otherwise indicated metrics are specific to Tektronix' Beaverton, Oregon facility.

UTILITY AND ENERGY USE:

Tektronix recognizes the impacts its operations have on the global environment, and the potential impacts of global climate change to all of us. We recognize that the biggest impacts our operations have on the global environment are related to our consumption of carbon based energy resources. Tektronix believes that the efficient use of energy is not only a sound environmental principle (reduced carbon and other emissions); it is good business practice, particularly given the volatility in the energy markets over the past few years. Some indicators of our commitment to energy conservation from 2007 through 2009 are:

- Conducted an energy Kaizen in 2009 which included a comprehensive energy 0 use analysis and the establishment of total and specific energy reduction targets. See the Environmental Initiatives section of this report for more detail.
- We participate in an "interruptible supply" natural gas program that allows our 0 local utility to divert gas to high priority users (residential, commercial and industrial) at times of low supply and high demand.
- We have been tracking total carbon emissions since 2002 and have 0 participated in the Carbon Disclosure Project, either directly prior to 2008 or indirectly as a Danaher subsidiary, since 2005.

While energy consumption is seasonally cyclical, we continue to see a downward trend in consumption and related emissions:





Tektronix Environmental, Health & Safety Report, 2009





SOLID & HAZARDOUS WASTE:

As a result of toxic use reduction and waste minimization initiatives, combined with changes in our business model, we have seen dramatic reductions in hazardous waste production and disposal over the long term. Recent data is provided below.



INJURY TRENDS

Tektronix is committed to the health and safety of our employees. This commitment has resulted in low incidence rates which have remained significantly below the national average in our industry for over a decade when compared to the Test & Measurement industry (NAICS 334515).

Tektronix goal is zero accidents. While we have yet to achieve that goal, Tektronix has experienced a downward trend for all recordable injury statistics for the past two years. The most recent year is the lowest DART we have seen.



Tektronix Global & USA Injury Case Rate/100 Employees

Tektronix USA Days Away, Restricted, Transferred Case Rate



Carbon Disclosure Project Supply Chain Management Program.

In 2009 Tektronix, completed an annual request for information from the Carbon Disclosure Project. This included our greenhouse gas emissions inventory and related climate change management strategy.

Our response were analyzed by the CDP and was benchmarked against the 709 other suppliers who responded to the information request in 2009. Tektronix' total score was slightly above the average and in the 2nd Quartile of all 710 responding companies' scores.

Tektronix' Total Score as well as a score breakdown from some of the other segments of the questionnaire are presented below.

Total Score (100 Possible)

Tektronix Score:	40
Average:	39

Reporting Capabilities

Tektronix Score:	80
Average:	50

Strategic Awareness

Tektronix Score:	50
Average:	43

Energy Conservation/GHG Reduction

Tektronix, together with Link Facilities Services as our facilities and maintenance service provider, has achieved significant accomplishments in the area of energy conservation and GHG reduction.



- Tektronix continues to actively participant in the Green Tag Program sponsored by the Bonneville Environmental Foundation (BEF). The Green Tag Program allows power users to purchase portions of their power from environmentally friendly energy sources. Each "green tag" is equivalent to 1000 kWh's of electricity generated from a renewable resource; in Tektronix's case, the power is generated from wind driven turbines located in Condon, Oregon. In 2009 Tektronix purchased about 1% of the Beaverton campus load in renewable energy.
- A 2009 energy kaizen event resulted in the identification of significant energy savings and associated GHG reduction opportunities which significantly contributed to a reduction of over 4 million kWh in electricity use (1,750 metric tons CO2e emissions) at our Beaverton campus in 2009 as compared to 2008.
- We anticipate and have targeted a further 5% reduction in our Scope 1 and Scope 2 GHG emissions from ongoing operations in 2010.
- Replaced a time clock controlled irrigation system with a smart system which controls irrigation based on real time measured criteria such as rainfall, temperature, and evaporation rate.
- Replaced of on-campus facilities service trucks with golf cart like vehicles to reduce fuel consumption and emissions. Our

maintenance fleet has been reduced to 1 gas powered full size van and 3 carts with a total fuel usage reduction of 700 gallons annually.

- Switched to biodiesel as fuel for the campus emergency generators.
- Acquired a LEED Silver building with reduced foot print to house on of our businesses.
 - 17% estimated saving in electrical costs
 - o 50% water use reduction
 - o Drought tolerant pants
 - Site water drainage directed to planting areas
 - Waterless urinals and automatic, solar power faucets
 - Ventilation system monitoring
 - Designated parking for low emitting and fuel-efficient vehicles
 - 70% of the existing trees preserved
 - 20% of building components are recycled materials
 - o 96% of construction waste recycled
- Implemented a preferred parking program for alternative fuel vehicles and installed electrical power outlets to accommodate a limited number of electric vehicles.

Recycling and Material Salvage

Tektronix has recycled a significant percentage of its solid waste through our Recycling and Materials Salvage (RAMS) operation since the 1970s.



RAMS is a centralized organization at Tektronix whose primary purpose is to find alternatives to landfill disposal of a variety of surplus materials, excess equipment and parts, and a multitude of generally discarded items generated by the company.

RAMS provides environmentally friendly alternatives to the disposal of these surplus materials in landfills; e.g., recycling, metals and precious metal reclaim, resale, and reuse within the company. In the past three years, over 560,000 pounds of material (metal-bearing material, electronic scrap, and plastics) was sold to reclaimers and recyclers. Through the resale of surplus and obsolete items through the Company Store, e-Bay, and direct outside sales, RAMS has generated nearly \$1 million in revenue over the past three years. In addition, over the past three vears RAMS has saved Tektronix nearly \$2.5 million through redeployment of equipment within the company. RAMS has also donated approximately \$600.000 in equipment to numerous universities, elementary and secondary schools and non-profit organizations.

Beaverton Campus Environmental Assessment

Since the mid 1980s, Tektronix has been working in partnership with the Oregon Department of Environmental Quality (DEQ), and the U.S. Environmental Protection Agency to identify and investigate areas of possible environmental contamination on the Beaverton campus. In connection with our continuing and cooperative efforts, Tektronix and DEQ entered into an agreement to complete sitewide investigations at the Beaverton campus.



Tektronix completed a Feasibility Study in July of 2008 and the DEQ issued a Record of Decision (ROD) regarding the site in July of 2009. The ROD establishes the in-place treatment of soil and groundwater contamination through the application of **Electrical Resistive Heating (ERH)**

- ERH involves installation of electrodes into the ground and applying electrical current between the electrodes.
- Natural electrical resistance within the subsurface generates heat.
- When the subsurface temperature is increased to the boiling point of the groundwater water steam is generated.
- Contaminants in the groundwater are transported upward by the steam.
- The steam also strips contaminants from the soils and enables them to be extracted from the subsurface.

 The steam is collected by a vapor extraction system, condensed, treated to remove the contaminant and the clean H2O is discharged to the sewer.





Tektronix Environmental, Health & Safety Report, 2009

Products



Design for Environment

Tektronix has a policy that all of its products will meet applicable regulatory standards and requirements in all geographies where they are marketed and sold.

- Our commitment to the environment doesn't end with meeting the minimum requirements; that is our starting point.
- New products receive applicable certification before they are offered for sale. Certification may take the form of a company-declaration (e.g., CE mark), or it be third-partv certification. mav а registration, or license (e.g., Underwriters Laboratories registration, GOST for Russia, selected telecom registrations, RESY packaging marks, RBRC battery mark, Green Dot packaging recycling, etc.).



Tektronix maintains an industry leading product compliance organization which is spearheading our many initiatives to reduce the environmental impacts of our products.



 We have a Restriction of Hazardous Substances (RoHS) strategy in place to design and manufacture all our products to be RoHS compliant by January, 2015, two years ahead of the anticipated required compliance date.

All new designs have eliminated the use of cadmium.



 Hexavalent chromium conversion coatings have been eliminated from custom parts and new designs.

 A Design for Environment specification has been in place since 2008 to better inform our custom parts suppliers of the evolving requirements for materials substitutions.



 Plastics Identification: ISO-11469 codes are molded
into plastic parts to aid in their recycling at end of product life.

- Halogen Free: We have used halogen and antimony-free plastics for our product enclosures, the bulk of our plastic use, since 1999.
- Tektronix is actively engaged in a corporate wide initiative working with industry consortia to develop and define common technical qualification criteria, acceptable material alternative, and testing and reporting standards that will allow us to transition our product designs to meet evolving regulatory obligations.

Tektronix Environmental, Health & Safety Report, 2009

Packaging:

 We switched from a box or box + retention sleeve packaging design to a roll-up cardboard sleeve style of packaging for several small products (e.g. dongles, software kits). Material savings per item ranged from 20 g to 215 g of corrugated (16.7% to 68.3% reduction in material).



 Recycled material content increase: As products are transitioned to China, the amount of recycled content in the corrugated material is being increased from 37% to 75%. I don't have figures on our global use of cardboard to further quantify the improvement.

Energy Efficiency



A program is in process to transition external power supplies utilized in new products and service applications to more energy-efficient, Energy Star-compliant models. This change will save our customers energy in both standby and operational mode.

 In one case the energy efficiency in use mode was increased by over 25% resulting in a 50% performance improvement.

Battery Recycling



photo courtesy of RBRC

Tektronix has been a licensee to the Rechargeable Battery Recycling Corporation (RBRC) battery collection system since 1999, to aid in the collection and recycling of nickel cadmium (NiCd), nickel metal hydride (NiMH) and Lithium-ion battery packs used to operate portable instruments. Since 2001, all new portable products have been designed using environmentally friendly lithium-ion power sources, to eliminate the environmental risks associated with cadmium containing batteries.

Health & Safety

Tektronix recognizes the importance of a safe and healthy work environment. We count on all employees to make Tektronix a safe work place. The commitment to a safe workplace is an integral part of doing business and is communicated annually to all employees in our business ethics and compliance program:

"We are committed to providing a safe and healthy workplace. Each of us is responsible for observing all of the safety and health rules that apply to our jobs. We are all responsible for taking precautions to protect ourselves and our fellow associates from accident, injury or any unsafe condition. Additionally, each of us must promptly report accidents, injuries and unsafe or unhealthy conditions, practices or equipment".

Danaher Standards of Conduct

Global Occupational Health and Safety Management System

The Environmental. Health & Safety developed alobal organization has а Occupational Health & Safety Management System (OHSMS) and supporting guidance documents. With the recent release of the Global Occupational Health and Safetv Management System Policy. Tektronix is moving ahead with a multi-year phase-in of the OHSMS.

The OHSMS provides us with a systematic management process for global Occupational Health & Safety (OHS) performance (much as ISO-9000 does for Quality and ISO-14001 does for Environmental). Tektronix chose to be proactive and implement the OHSMS for several reasons. First, the safety of our employees is of utmost importance. Tektronix is committed to providing a safe and healthy workplace for all employees world-wide. The OHSMS provides a standardized and formal safety management system that results in increased safety awareness and reduction in risks. Second, it is becoming more and more common for our customers to evaluate our OHS performance as part of their selection criteria. In this respect, having an OHSMS in place helps us effectively communicate our commitment to safety as well as our outstanding safety record.

The global OHSMS effort is monitored monthly via an electronic reporting system. Each location reports OH&S activities associated with (training, government inspections, audits, drills, OHS improvements) and accident information through the system.

China Operations continues to expand as a result, a new OH&S position was created to take on the increasing demands of the local operations OH&S needs.

OH&S Risk Assessments

In step with our global efforts, international locations will undergo OH&S Risk Assessments. Identified unacceptable risks will be managed through the corrective action management systems.

Our People

Tektronix recognizes employees make a difference. We ask employees to be engaged and step up to the challenge of continuously improving the work environment. The following is a partial representation of how some of our employees participate to improve work place safety.

Safety Committees consist of both managers and employees who are empowered to take actions to resolve safety issues. Committees play a key role in identifying and correcting hazards.

Working Teams or work groups consisting of employees, engineers and managers are formed to address safety, production or quality improvement issues. For example, a Lean Manufacturing group identified foot and leg fatigue as a potential problem. The work group resolved the issue by installing anti-fatigue mats, sit/stand chairs and cushioning devices for shoes. **Measuring/reviewing Safety on a daily basis**: Tektronix is improving safety performance through use of Danaher Business Systems tools. In the manufacturing environment, safety is a topic of discussion at the beginning of each shift using a TQDQI 5s/safety tool board. Open safety issues are carried over to the next day's 5S/safety discussion until the issue is resolved.

Training & Education: To help our employees reduce the risk of injury at work, employees are required to attend relevant safety training and education to improve their knowledge in hazard recognition. More and more OH&S trainings are available on demand through our intranet. Depending on the employee's job responsibilities the training/education could be in one or more of the following:

- Electrical Safety
- EHS Awareness for New Hires
- Chemical Hazards
- Controlling Hazardous Energy Sources
- Lead Safety Awareness
- Personal Protective Equipment
- Building Evacuation/Emergency Preparedness
- Other Safety & Health topics associated with their job.

Health & Safety Audits

Health & Safety audits are conducted routinely to evaluate the effectiveness of the H&S programs. The reviews target higher-risk operations and utilize a closed loop corrective action management systems.

Chemical Safety

New-to-Tektronix chemicals are reviewed by the EH&S department utilizing an electronic chemical approval process. This process evaluates the toxicology and addresses safe handling, usage, storage, and disposal precautions.

Ergonomics

Tektronix is progressive in helping to improve working conditions and optimize performance through applied ergonomics. Based on workplace surveys, 99% of our employees believe ergonomics is a good investment.

Office Ergonomics



Tektronix requires new office workstations and task chairs be adjustable to facilitate employee comfort and safety. In addition to providing employees with information on proper workstation setup, Tektronix offers various ergonomic accessories and an opportunity to get advice from our health and safety staff. Qualified ergonomics evaluators are available to help employees with specific needs.

Manufacturing Ergonomics



Ergonomic design is an integral part of the manufacturing engineering process. New 'Tektronix Lean' work stations have been designed to minimize waste and maximize productivity and feature adjustable workbenches and tools to reduce risk factors associated with repetitive injuries.