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EcoAnalytix™ Initiative Backgrounder ***The new measure of success***

An industrial plant spews out unknown substances into the air and parents worry about the playground down wind. The safety of food is in question after a rash of pet food shipments from overseas is found to be tainted with cancer-causing melamine. Desalinated water destined for the drinking water supply can't compromise public health. Researchers are racing to find a new biofuel feedstock that saves energy and won't exacerbate the food versus fuel debate while maintaining engine performance.

Fortunately, there is a range of screening and sophisticated technologies to address these analytical concerns that impact the safety of our environment, food supply, energy sources and new materials. In this era of borderless economies, such testing is a necessity.

While the right instrumentation for the job is essential, it's not enough given the challenges laboratories face in this global economy:

- Resources are limited and laboratories face increasing pressure to meet ever-increasing productivity demands.
- The skill level of laboratory personnel can vary dramatically, making ease-of-use and tailored, complete solutions critical.
- Laboratory personnel need guidance including applications know-how and methods to ensure quality processes, reliable findings and reporting that will meet compliance requirements.
- New contaminants and adulterants are being introduced and methods for identification need to be accelerated and accurate.
- Accurate and timely results are a necessity – health and well-being is at stake.

With more than 60 years of experience in the analytical sciences business, PerkinElmer knows that the right training, methods, applications, reporting and support are as integral to getting answers as the instrumentation. That's why PerkinElmer has developed a novel approach to meet the challenges that today's laboratories face that is called *EcoAnalytix™*.

What is EcoAnalytix and Why EcoAnalytix?

EcoAnalytix is PerkinElmer's collaborative problem-solving initiative that creates application-based solutions to improve business ecosystems, while supporting local, regional and global initiatives that contribute to a healthier ecosystem worldwide.

It is through these focused solutions that PerkinElmer contributes to protecting and improving our world.

Eco:

What is Eco?

- "Eco" is derived from the idea of an ecosystem – a defined group of interdependent entities existing together within the environment they inhabit or depend on. This definition is not solely referring to the environment itself or a "green" initiative, although environmental solutions are a key area EcoAnalytix includes. EcoAnalytix applies as much to ensuring the quality of the food we eat and the fuel that runs automobiles as the air and water.

Why Eco?

- Because we want our customers to understand that we view their businesses as complete, unique and contributing ecosystems.

Analytix:

What is Analytix?

- "Analytix" refers to the process of analyzing and providing measurement – measurement covers the gamut of the ecosystem – anything that we consume, breathe, see or touch.

Why Analytix?

- Because we believe measuring and analyzing touches every aspect of life.

EcoAnalytix:

What is EcoAnalytix?

- Combined, "Eco" and "Analytix" refer to the analytical measurements of our entire world.

Why EcoAnalytix?

- Because only PerkinElmer can help our customers make a measurable difference.

About EcoAnalytix

PerkinElmer's EcoAnalytix market- and application-focused measurement solutions enable scientists to unleash their business potential to improve and protect our world.

The breadth of PerkinElmer's product offering in analytical instrumentation, software, consumables, applications and method development support, coupled with its lab services capabilities and geographic reach, allows the company to provide customers with discerning insight into the pressures of labs and how to mitigate them. Through this insight, PerkinElmer can develop the appropriate application solutions to speed the pace and precision of research and testing – whether routine or in response to natural or

manmade disasters – to help ensure that our ecosystem and public health and safety are preserved now and for future generations.

Such a holistic, or EcoAnalytix, approach is unprecedented in its support of contract, private, research and academic laboratories – whether a start-up in a rapidly growing economy or a high-throughput laboratory in a mature market. What all laboratories share is a need for accurate, reliable, dependable instrumentation and total solutions to monitor, analyze and detect changes in our ecosystem and ensure the quality of products globally, whether it is food, air water, biofuels, pharmaceuticals or new materials.

EcoAnalytix is supported at the highest levels in PerkinElmer globally and takes the company's commitment to customers to the next level.

Components of EcoAnalytix

There are four components that make up the EcoAnalytix initiative:

- Thought leadership
- Application platforms
- Eco-consciousness
- Community outreach

Thought Leadership

Given the company's deep expertise and longevity in the analytical sciences industry, PerkinElmer works with globally recognized experts and regulatory agencies around the world to help drive regulatory practices and shape methods, e.g., the U.S. EPA, the U.S. Food and Drug Administration (FDA), U.S. Customs, the USDA, ASTM and Europe's CEN. For example, environmental experts are actively involved in the establishment of EPA and EU methods, which in turn usually set the standard for other countries. PerkinElmer has dedicated teams of experts to support thought leadership in food safety and biofuels, in addition to environmental.

Most recently, the FDA turned to PerkinElmer and Flora Research Laboratories for development of the first gas chromatography/mass spectrometry melamine application. PerkinElmer is also providing guidance for agencies in China, India and other developing countries as they create infrastructure.

A new, automatic reporting technology allows verification of compliance with EPA regulations. PerkinElmer's unique headspace trap with GC reaches high sensitivity in water and the company is driving incorporation of the technique in EPA regulations.

PerkinElmer is supporting Chinese laboratories in analysis for pesticide registration, safety for consumption and the environment. The company is also creating turnkey packages for developing countries including instrumentation, software, service, SOPs and initial validation.

Given its industry leadership position, the Indy Racing League turned to PerkinElmer for guidance through its recent conversion of racecar fuel to biofuels. The British Auto Racing Honda F1 team also relies on PerkinElmer for technical support in the analysis of engine performance.

PerkinElmer supports investigation of newer technologies that contribute to improving and protecting the world, new applications for existing technologies and the development of cross technology platforms that address the full breadth of an application or analysis.

For example, two new PerkinElmer Application Development Centers, in Shanghai and Mumbai, are established and being resourced to help facilitate support of responsible growth within the industry and to support rapidly growing infrastructure in developing countries. In addition, PerkinElmer is launching educational seminar series dedicated to helping developing countries navigate regulatory compliance and emerging trends.

PerkinElmer's research and development (R&D) is focused on helping to evolve products to be more efficient and help laboratories increase productivity. The company annually invests more than 6 percent of its Analytical Sciences gross revenue in R&D. PerkinElmer works to help shape and change regulations to ensure that better and faster technologies and methods become the global standard.

Application platforms

Through its EcoAnalytix initiative, PerkinElmer is providing laboratories with application-focused solutions that meet their regulatory, technology and operational requirements to help their business ecosystems thrive.

With new, adjacent and existing technologies platforms, intuitive SOPs and world-renowned applications support, EcoAnalytix gives laboratories new means to improve efficiency, productivity and compliance while arriving at answers faster.

PerkinElmer is systematically combining relevant technologies and products to deliver a platform for successfully completing the set of analyses required for a given application or market such as water analysis in the environmental market, food safety/quality analysis in the food and beverage market and biofuels analysis in the biofuels market. The breadth of PerkinElmer technologies, products, services and global reach provide a strong backbone for the basis of these platforms.

Primary Areas of Focus

The EcoAnalytix initiative will initially focus on three primary areas that are integral to global health and well-being:

Environmental – PerkinElmer solutions are critical to monitoring of water and air pollution and soil contamination and other effects of the environment on human health. For example PerkinElmer is the world leader in inorganic analysis to support research and testing to ensure the safety of water, soil/waste and air from trace metals. The company also has a 50-year history in Chromatography, a fundamental technique for measuring water and air pollution and soil contamination. PerkinElmer is also the market leader in remote air monitoring of complex compounds, with its Ozone Precursor Analyzer enabling ongoing monitoring of ground-level ozone precursor compounds to ensure the safety of ambient air and air in the vicinity of industrial plants. PerkinElmer also offers solutions to test environmental safety in the workplace, including the quality of indoor air.

Food Safety – PerkinElmer instrumentation is used in food quality and food safety research and testing, encompassing authenticity, potency, manufacturing and

contamination that directly impacts the health of all living things. PerkinElmer can help test the safety of the food supply from the source of ingredients to the final product (from the farm to fork), with a high level of sensitivity and reliability. PerkinElmer solutions support compliance requirements globally and can support litigation and patent infringement lawsuits should they arise, enabling laboratories to have confidence in the instrumentation performance and robustness.

Biofuels – PerkinElmer innovations are helping the rapidly growing biofuels industry by ensuring the quality of biofuels from the field through processing to the final product in the tank to ensure that this renewable fuel is clean burning. A dedicated team of PerkinElmer experts is focused on turnkey, packaged solutions and applications support that enable laboratories across the globe to explore and test conventional feedstock and alternatives such as cellulose for ethanol production and algae for biodiesel production.

PerkinElmer is introducing, as part of its EcoAnalytix launch, a series of analyzers and support material focused on water, soil and wastewater analysis.

EcoAnalytix Water Analysis Products:

- ELAN[®] 9000 Method 200.8 Analyzer – for drinking, wastewater and soil analysis. Based on our leading ELAN 9000 ICP-MS technology, this analyzer includes methodology, applications and SOPs to facilitate compliance.
- ELAN 9000 FAST Water Analyzer - for drinking, wastewater and soil analysis. Based on our leading ELAN 9000 ICP-MS technology and combined with the ESI FAST autosampler to deliver improved productivity and lower the cost of ownership, this analyzer includes methodology, applications and SOPs to facilitate compliance.
- PAH Analyzer – for PAH (Poly-Aromatic-Hydrocarbons) in water, soil and food. Based on PerkinElmer's robust, reliable Series 200 PDA HPLC, the PAH Analyzer provides everything required for a quick set-up and analysis (application guidebook, columns, standards, methods) and meets all EPA criteria.
- Water Analysis Applications CD – contains methods and applications demonstrating PerkinElmer's broad offering.

EcoAnalytix Food Safety Analysis Products:

- PAH Analyzer – for PAH (Poly-Aromatic-Hydrocarbons) in water, soil, food. Based on robust, reliable Series 200 PDA HPLC. Provides all required for a quick set-up and analysis (application guidebook, columns, standards, methods). Meets all EPA criteria.
- Melamine Analyzer – for analysis of melamine, a polymer contaminant spiked into food to falsely elevate protein interpretation. Based on the Clarus[®] 600 GC/MS. First dedicated system in the market. Capability to exceed quality control criteria of the existing U.S. FDA methodology.
- Food Safety Applications CD - contains methods and applications demonstrating broad PKI offering.

EcoAnalytix Biodiesel Analysis Products:

- ASTM D 6751 Biodiesel Platform – adhering to ASTM method D 6751. Comprises Clarus 500/600 GC with FID for analysis of free and total glycerin; Optima 2100 DV ICP-OES for Group I (Na & K), Group II (Ca & Mg) and Phosphorous; LABWORKS[™] Green for managing information and delivering certificates of analysis.

- EN 14214 Biodiesel Platform - adhering to EN method 14214. Comprises Dual oven Clarus 500/600 GC with FID for analysis of free and total glycerin and ester, methyl linolenate, and methanol (unique PKI offering); Optima 2100 DV ICP-OES for Group I (Na & K), Group II (Ca & Mg) and Phosphorous; Spectrum™ 100 FT-IR system for determining Content of FAME (fatty acid methyl esters); LABWORKS Green for managing information and delivering certificates of analysis.

Eco-Consciousness

PerkinElmer is dedicated to ensuring that its facilities and employees operate in a manner that is environmentally conscious and contributes to a better world.

Through internally established programs, PerkinElmer facilities are taking an active role establishing programs to minimize impact on the environment.

PerkinElmer has a policy worldwide to operate in a manner which protects the environment and the safety and health of employees and the public. Toward that end, the company is actively examining options for how to reduce the ecological footprint caused by the consumption and eventual disposal of instruments. It is also integrating environmental safety and health considerations into business planning while seeking conformance with recognized management standards.

PerkinElmer is continuing, as always, to establish processes to assure compliance with all applicable laws and regulations and communicating with employees, customers and other interested parties about significant hazards of its products and operations.

Whether in the laboratory, production facilities or other operations, the company is designing safe products and processes that prevent pollution, conserve resources and reduce waste. Employee involvement is integral to the continuous improvement of environmental safety and health programs.

Community Outreach

PerkinElmer's EcoAnalytix program encourages local and global advocacy and partnerships for ecosystemic excellence on all levels while helping business ecosystems within industry thrive. By focusing on ultra-analytical industries – such as the biofuels, environmental and food safety and quality industries, EcoAnalytix addresses the many ecosystems that make up the largest ecosystem of all: our world.

PerkinElmer is working with and through customers, local governments and NGOs and the public to generate awareness of topics of importance to global health and well-being to people across the world.

In support for safeguarding our water resources, PerkinElmer has formed its first water partnership with the Water Environment Federation (WEF) and the International Water Association (IWA)'s World Water Monitoring Day (WWMD). WWMD is an international outreach program that builds global public awareness of and involvement in protecting water resources by engaging community members to perform basic monitoring tests of local rivers, streams, estuaries and other bodies of water. Through this partnership, PerkinElmer is collaborating with WEF and its other sponsors and partners to help generate awareness of the importance of clean water throughout the global community.

PerkinElmer is proactively seeking new community outreach partnerships with environmental, food safety and quality and biofuels organizations that have a complementary mission to protect and improve our world.

Web Site

For more information on the EcoAnalytix initiative, please visit www.perkinelmer.com/ecoanalytix.