environment * energy * health * safety

INX

Doing our part for a sustainable future

Green Milestones & Current Activities

Corporate Activity

- Since establishing its first Environmental Department in 1973, our parent company SAKATA INX Corp of Osaka, Japan has responded to the changes of the times and has maintained environment preservation and safety management as important priorities. The company has set up an Environmental Management Committee, headed by the President that oversees the Environmental Control Committee which is responsible for our Research & Development and Product Production
- Executive Management committed the company to a formal sustainability initiative and created a company-wide Green Team to lead our efforts. The team includes 13 members from different facets of the company including research & development, operations, environment, health and safety, quality systems management, sales and executive management. They work to formulate and implement key Corporate Sustainability Initiatives. The team distributes the intelligence and tools gathered among the facets of INX including sales, technical service, operations and research & development. The team places emphasis on innovation and ways to add value, not just to the bottom line, but to the environment and society at large.
- Foster local green teams at our facilities to educate our employees and encourage them to green the workplace and their homes with many incentives to go green.
- Established INX2012 Environmental Sustainability Agenda that details the 6 key sustainability areas of focus for our company: 1) Energy & Utility Use, 2) Waste Reduction & Landfill Elimination 3) Product Design for the environment, 4) Waste Water Reduction, 5) Materials Sourcing & Supply Chain Management, 6) Social Responsibility.
- Survey of INX sites twice a year to establish a baseline, set goals and measure results for the activities we are concerned with improving as part of the Green initiatives. The survey has 6 sections: 1) Solid Waste Reduction and Recycling, 2) Energy Conservation, 3) Natural Gas Conservation, 4) Water Conservation, 5) Pollution Prevention and 6) Employee Involvement. Summary Report is distributed to all General Managers and Executive Management
- Our operations have committed to sustainability goals in their strategic plans. We have consolidated facilities where necessary to reduce the overall production footprint and improve effectiveness of production and material movements.

Energy & Utility Conservation

- Utility Management Services are used to track and monitor utility usage at all INX plants. We use intensive plant audits and analysis of utility data to reduce and better manage our electricity, gas, water/wastewater, petroleum and telecommunications usage.
- Maximization of equipment utilization through process flow analysis and value stream mapping to identify all areas of waste and non value added activities. This reduces wasted energy, material movements and improves efficiency significantly.
- Installation of energy efficient lighting upgrades in all INX plants includes replacement of mercury and sodium vapor with T8 and T5 type fluorescent lighting.
- Scheduling high energy demand operations during non peak hours, using capacitors and line filters, adding VFD (variable frequency drive) systems, all help to help reduce the peak demand on the electric utilities.
- Computerized Programmable Logic Controllers (PLC) for the operation of Process temperature controlled areas for reduced energy consumption. Complete shut down of production lines when we have decreased forecast demands.
- Replacement of Propane gas forklifts with electric lifts, and manual material movers reduces consumption of fossil fuels and generation of exhaust fumes.
- Motion detection light switches in certain areas and installation of programmable thermostats
- Weather stripping and caulking of doors and windows, and building joints.
- Large air movement fans in place of air conditioning equipment for production floors.
- Migration of old facilities and operations to new more efficient state-of-the-art production facilities Charlotte, Appleton, Homewood and West Chicago.

Waste Reduction & Landfill Elimination

- Exclusive INXManager™ software assists with color management and overall inventory and waste control. It enables reuse and working of excess or obsolete ink, reducing print waste thus saving ink costs as well as waste disposal efforts and expenses.
- Reduce waste throughout the product lifecycle via recovery and recycling of inks and coatings
- Re-use of packaging materials and pallets for transportation of materials
- Continuous Improvement teams have achieved conservation results by improving change over practices, introduction of new “short run” milling technology, major improvements to piping techniques, and special self cleaning filtration systems. These teams have set targets for zero % landfill of waste materials.
- Solvent distillation to capture and re-use clean up solvents.

Product Design for the Environment

- SAKATA INX Product Design methodology considers the following burdens to the environment; Resource Conservation, Prevention of Global Warming, Protection of the ecosystem, Conservation of air quality, Conservation of water quality, Reduction and recycle of waste, Avoid or reduce use of hazardous materials. These initiatives are considered at each step of the following product design process: Purchase of materials, Manufacturing, Shipping & Delivery, Printing & Consumption, Dispose or recycle of printed material.

- Compliance with federal and international standards concerning lead and other heavy, high toxicity metals prohibiting use of lead, cadmium, hexavalent chromium and mercury.
- Approximately 30% of INX products are formulated with naturally replenishable raw materials such as linseed, soybean and other vegetables oils.
- Offset & Energy Curable inks that qualify for the American Soybean Association Soy Seal with more than 20% soy oil.
- Energy Curable UV & EB inks are formulated VOC and HAPS (Hazardous Air Pollutants) free while providing efficiency gains and reduced waste with a potential for reduced overall energy consumption resulting in reduced C02 emission
- 40% of flexographic inks for flexible packaging are water based, low-VOC, with no HAPS or SARA-reportable materials
- Low Temp heatset inks enable printers to reduce energy usage, enhancing their environmental performance

Water Conservation

- Installation of special evaporative chilling equipment, allows us to continually re-use a limited amount of water to cool process equipment.
- Careful monitoring of irrigation systems to assure proper control and settings.
- Water Treatment and Purification Systems allow our facilities to capture waste water and perform on site purification practices to reduce the waste stream and overall consumption of water.

Materials Sourcing & Supply Chain Management

- Raw material selection process complies with federal and international standards concerning lead and other heavy, high toxicity metals. Toxics in Packaging Clearinghouse (TPCH) Model Legislation (formerly known as CONEG – "Coalition of Northeastern Governors" Legislation) specifically prohibits use of lead, cadmium, hexavalent chromium and mercury.

Social Responsibility

- Manage business processes to produce an overall positive impact on society.
- Behave ethically and contribute to economic development while improving the quality of life of our employees and their families as well as the local community and society at large
- TPM plant improvement methodology based on "*Lean Manufacturing*" Practices.
- INX International partnered with Mecklenburg County officials to take environmental stewardship a step further. INX donated its former plant and flood-prone acreage along Little Sugar Creek to the County for open space and floodplain protection purposes — making it a model for preventing flood losses, improving the environment and boosting the economy.

Certifications, Awards and Recognition

- **First North American ink manufacturer to obtain ISO-14000 Certification (Dunkirk, NY).** ISO 14000 is the Environmental Management Standard. Certification to this standard provides assurance that the organization made a commitment to improving the environment. This commitment involves determining the company's environmental aspects and impacts, and implementing programs to improve its environmental performance. Compliance requirements are also determined and audited in ISO 14000. West Chicago and Charlotte operations are actively pursuing certification and all other locations will be internally required to comply with ISO 14000 procedures.
- **INX has adopted the ISO 9001:2000 Quality Management Standard.** We have eight sites which are fully certified to the ISO 9001-2000 standard with SGS as our registrar: our Customer Service Center and the following plant locations: Appleton, Charlotte, Dunkirk, Kalamazoo, Morse Ave, St Louis and West Chicago. Our remaining sites are internally required to comply with our ISO 9001 Level I and II procedures.
- **National Environmental Performance Track Member since 2002 (Dunkirk).** The National Environmental Performance Track ("Performance Track") is a public-private partnership that encourages continuous environmental improvement through environmental management systems, community outreach, and measurable results. It recognizes and drives environmental excellence by encouraging facilities with strong environmental records to go above and beyond their legal requirements. Members set typically four public, measurable goals to improve the quality of our nation's air, water, and land.
- **Triangle Digital INX became a certified Green Business in April of 2008 sponsored the Bay Area Green Business Program.** The Program is backed by the US EPA, CAL EPA, and the DTSC (Department of Toxic Substances Control). This program scrutinizes Compliance of; Air Quality, Hazardous Material Storage, Storm Water Management and Hazardous Waste Management. This program also requires going beyond compliance to adopt environmentally-sound practices in the areas of Energy efficiency, Water conservation, Solid and hazardous waste reduction and Pollution prevention.
- **INX Field Ops-Sacramento certified as "Sacramento County Sustainable Business" through Sacramento County's Business Environmental Resource Center (BERC).** INX Sacramento is one of only 7 businesses in Sacramento County that has achieved all 5 areas of certification (Energy Conservation, Water Conservation, Pollution Prevention, Solid Waste reduction, and Green Building). We are currently working to achieve the top status level of Gold certification
- **Orion Environmental Stewardship Award (for energy reduction)**– Charlotte Plant (2006), Milwaukee Plant(2003), Edwardsville plant (2003)
- **INX International Ink Co REACH Act Compliance.** The European Commission adopted a new EU regulatory framework for chemicals - "REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL" concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (commonly known as REACH). INX International Ink Co. and its affiliated companies are well aware of the REACH Regulations and are committed to the implementation of REACH within our business. We are working with trade associations, our suppliers and our customers already and will continue to do so over the coming years on the implementation of REACH.