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J&J Safety, Health & Environmental Goes “Beyond Compliance” to Create a Competitive Advantage

Submitted by:

Johnson & Johnson

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THE ROBERT W. CAMPBELL AWARD - 2005 CASE STUDY SUBMITTAL

Johnson & Johnson
Safety, Health & Environment Goes “Beyond Compliance” to Create a Competitive Advantage
for our Global Businesses

Executive Summary:

Johnson & Johnson’s Safety, Health & Environmental (SH&E) functions are organized under the Technical Resources & Compliance Group (TRC) to optimally service 200 operating companies worldwide related to the manufacture of health care products for the consumer, pharmaceutical, medical devices and diagnostics markets. TRC’s mission is to create competitive advantage for the Johnson & Johnson operating companies through a strategy of beyond compliance, delivering outstanding service to our customers in pursuit of their business objectives. This case study focuses on TRC, which provides SH&E leadership, support and consulting services to all 200 operating companies around the globe.

SH&E commitment and accountability start at the highest level of the Corporation: the Office of the Chairman. Also at the top corporate level is the Public Policy Advisory Committee (PPAC) of the Board of Directors. The PPAC oversees the policies, programs and practices on public health issues regarding the environment and the health and safety of employees. It is an umbrella that covers, for example, a Tobacco-Free Workplace Policy, a Policy on the Employment of Young Persons, a Climate Friendly Energy Policy, and a Zero Access™ Machine Guarding Policy. The corporate strategy—supported at all levels of the organization and echoed in Our Credo of 60 years—is to be the most innovative, most profitable, healthiest, safest and most environmentally responsible health care products company in the world.

Johnson & Johnson’s goal to be the best drives senior leadership to embrace a philosophy of Beyond Compliance, which we believe creates a competitive advantage for Johnson & Johnson. So powerful is this approach that it was recently adopted as a management imperative for all aspects of Johnson & Johnson’s business.

The Beyond Compliance approach is operationalized in the Management Awareness and Action Review System (MAARS), the global process for ensuring SH&E compliance, going beyond regulatory requirements and reducing risk. A suite of technically specific assessment and reporting tools feed into MAARS to create dashboards that make improvement areas readily identifiable. Not only has MAARS enabled the identification and treatment of high risk areas, but it has led to accident prevention,

productivity improvement, and cost avoidance, saving Johnson & Johnson associates pain and suffering, and, the corporation millions of dollars.

A key reason Johnson & Johnson employees live Our Credo using Beyond Compliance methods is senior management leadership and hands-on involvement. Chairmen, Board Members, Presidents and Vice Presidents do more than financially support SH&E efforts. They are actively involved in communicating the SH&E message, monitoring progress toward goals, and signing off on improvement action plans.

SH&E communications and measures are in effect at all levels and in all types of operations at Johnson & Johnson. Key initiatives that create a safe, healthy and environmentally conscious culture are: Safety Through Design (integrating safety during initial process design), Healthy People 2005 (high risk reduction for optimal health), Design for the Environment (early rating of processes for environmental factors), and Safe Decisions for Life (awareness program for hand safety and fall prevention at work and at home).

Besides addressing the health and safety of our employees, Johnson & Johnson reaches out to the community, taking a Beyond Compliance approach to human and environmental responsibility, striving for performance that exceeds regulatory requirements. Many sites are involved in voluntary SH&E certification or protection programs to ensure exemplary safety and health efforts and results. Johnson & Johnson was welcomed into a three-year strategic partnership in ergonomics with OSHA. The purpose of that partnership is to offer OSHA firsthand knowledge of our ergonomics programs. A partnership with Federal Express designed a protocol so that all companies can ship used health care products more easily and less costly. That protocol was ultimately incorporated into the Department of Transportation's (DOT) Federal Register. Universally applicable health and safety initiatives such as Safe Decisions for Life and Healthy People 2005 are designed for employees to use with their families in all aspects of their lives.

Johnson & Johnson's technical infrastructure supports optimal learning and sharing of information. SH&E procedures and guidelines are part of a document management system that enables efficient updating as regulations and processes change. e-Learning facilitates quick and cost effective training of new and tenured employees, and contractors as well. On-line reporting systems and resulting dashboards enable access to performance metrics at any time. The most important outcome of the performance measurements and information management systems is that they aid in identifying potential risk areas before they cause incidents.

The greatest evidence of Johnson & Johnson's consistent improvement and commitment to SH&E is our results. Nearly every safety performance indicator is at its lowest rate in history. We are measurably improving the health of our employees with reduced smoking, blood pressure, cholesterol, and inactivity levels. We have exceeded many of our environmental Next Generation Goals.

Johnson & Johnson recognizes that all of our constituents—the people who use our products and services, our employees and their families, the communities in which we live and work, the world community, and our shareholders—rightly hold us to a high standard of performance. It is our integrated, Beyond Compliance approach to improvement that yields Johnson & Johnson's impressive results. Under the TRC umbrella, the safety, health and environmental efforts seek to create Healthy People, a Healthy Planet, and Healthy Futures.

Business Profile

Johnson & Johnson is the world's most comprehensive and broadly based manufacturer of health care products for the consumer, pharmaceutical, medical devices and diagnostics markets (ISIC code 2834). Johnson & Johnson employs 109,900 people in 57 countries around the world. More than 200 operating companies produce thousands of products spanning our three business segments (See Exhibit A: Johnson & Johnson Fact Book 2004):

- Consumer — Includes products for skin, hair care, sanitary protection, wound care, oral care, baby care and nonprescription drugs.
- Pharmaceutical — Develops medicines in areas that include gastroenterology, oncology, central nervous system, dermatology, immunotherapy, cardiovascular disease, mental illness and family planning.
- Medical Devices and Diagnostics — Product lines include surgical implants, instruments, needles and sutures, wound closure devices, orthopaedic products for joint repair and lenses; clinical chemistry systems; medical devices, including cardiovascular monitoring and vascular access products; intravenous catheters and shunts; coronary and biliary stents; and diagnostics used in physicians' offices and laboratories for identification of diseases.

Johnson & Johnson stock is publicly traded on the New York Stock Exchange (symbol JNJ). Our stock has been included in the Dow Jones Sustainability Index (DJSI) since 2000. The DJSI family follows a best-in-class approach to identify sustainability leaders in each industry. Worldwide sales were a record \$47.3 billion in 2004, representing a 13.1 percent increase over the previous year, our 72nd consecutive year of sales growth. (See Exhibit B: Johnson & Johnson 2004 Annual Report, page 1.)

Leadership

Johnson & Johnson is a values-based business. Everything done flows from the tenets embodied in Our Credo, a statement established by the corporation to fulfill its responsibilities to customers, employees, communities and shareholders. A key sentence of Our Credo is on the cover of the Johnson & Johnson 2004 Annual Report, and it is printed in its entirety on the back cover as it has been for many years (See Exhibit B). Our Credo principles have guided us for over 60 years and will continue to set the tone of integrity for the entire company in all aspects of our global business. (See Exhibit C: Johnson & Johnson Our Credo at Work — Celebrating 60 Years.) Dedication to our safety, health and

environmental responsibilities is an integral part of the Credo culture, as evidenced in the highlighted sections of Our Credo:

Our Credo

We believe our first responsibility is to the doctors, nurses and patients, to mothers and fathers and all others who use our products and services. In meeting their needs everything we do must be of high quality. We must constantly strive to reduce our costs in order to maintain reasonable prices. Customers' orders must be serviced promptly and accurately. Our suppliers and distributors must have an opportunity to make a fair profit.

We are responsible to our employees, the men and women who work with us throughout the world. Everyone must be considered as an individual. We must respect their dignity and recognize their merit. They must have a sense of security in their jobs. Compensation must be fair and adequate, and working conditions clean, orderly and safe. We must be mindful of ways to help our employees fulfill their family responsibilities. Employees must feel free to make suggestions and complaints. There must be equal opportunity for employment, development and advancement for those qualified. We must provide competent management, and their actions must be just and ethical.

We are responsible to the communities in which we live and work and to the world community as well. We must be good citizens - support good works and charities and bear our fair share of taxes. We must encourage civic improvements and better health and education. We must maintain in good order the property we are privileged to use, protecting the environment and natural resources.

Our final responsibility is to our stockholders. Business must make a sound profit. We must experiment with new ideas. Research must be carried on, innovative programs developed and mistakes paid for. New equipment must be purchased, new facilities provided and new products launched. Reserves must be created to provide for adverse times. When we operate according to these principles, the stockholders should realize a fair return.

The logo for Johnson & Johnson, featuring the company name in a classic, cursive script font.

The principles embodied in Our Credo have been translated into tactical safety, health and environmental (SH&E) roadmaps stressing accountability and management responsibility. The themes of these roadmaps are summarized with the phrase: Healthy People, Healthy Planet, Healthy Futures.

- Healthy People — Valuing all employees while promoting healthy lifestyles and safe work practices.
- Healthy Planet — Conserving natural resources, respecting ecosystems and reducing our environmental footprint.
- Healthy Futures — Improving health care and supporting the well-being of people and communities.

Johnson & Johnson's corporate leadership drives our citizenship. There are numerous examples of SH&E corporate citizen efforts, all of which continue to leave their caring imprint on the community in which the effort began, and have spread to other communities around the world. Here are a few of the more recent sustainable citizenship efforts:

- 2003 — Health & Wellness launches Healthy People 2005 in Johnson & Johnson's US companies. Taking its lead from the U.S. Department of Health & Human Services' "Healthy People 2010," Johnson & Johnson sets aggressive targets for improving the health of its employees. Participants have access to wellness and intervention programs in tobacco use, high blood pressure, high cholesterol and inactivity, as well as other behavioral programs. As of June 2004, the set targets in employee reduction of smoking, high blood pressure and cholesterol were exceeded—three of our four indicators. Activity levels as an employee group have improved, but are still below target levels. This led to the distribution of free pedometers to 22,000 employees to encourage their taking 10,000 steps a day. (See Exhibit D: Johnson & Johnson Healthy People 2005 Employee Summary, 4th Quarter, 2004.)
- 2003, 2004 — *Helmets for Kids* is a community safety effort developed in the Asia Pacific region where driving a bicycle or riding as a passenger on a motorbike are common modes of transportation. Employees of Johnson & Johnson started a grass-roots effort to protect their own children, which evolved into the region becoming the National Sponsor for the *Helmets for Kids* program in Vietnam. Launched as part of the World Health Organization's (WHO) World Health Day 2004 in collaboration with Asia Injury Prevention Foundation, the program distributed protective motorcycle helmets to 1,600 schoolchildren in Hanoi. By year-end 2004, over 6,000 helmets had been distributed across four schools. Letters from parents, teachers and principals thanking Johnson & Johnson for saving lives and instilling a sense of personal safety have been sent to Stefan Phang, Johnson & Johnson Worldwide SAFE Fleet Manager for Asia Pacific who spearheaded the project. (See Exhibit E: *Accidon'ts* (Jan-Mar 2004, page 1; Apr-Jun 2004, page 3; Jul-Sep 2004, page 1; Oct-Dec 2004, page 6)) (and Exhibit F: Johnson & Johnson 2004 Sustainability Report (cover and page 13-14).)
- 2005 — In May of this year Johnson & Johnson will launch a worldwide Tobacco-Free Workplace Policy prohibiting smoking at all company locations, including property, buildings, leased buildings, company vehicles and company-sponsored functions. The policy will be fully implemented no later than January 1, 2007, derived from Our Credo responsibility to provide employees a safe and healthy work environment. Along with the policy smoking cessation programs, educational materials and behavior modification tools will be made available. (See

Exhibit G: Tobacco-Free Workplace Policy.)

- Janssen Pharmaceutica in Titusville, New Jersey was awarded a River Friendly Certification from the Stony Brook-Millstone Watershed Association to recognize Janssen's water conservation and stormwater management practices. Particularly noteworthy is the facility's significant reduction in use of pesticides and fertilizers, and increase in the level of internal water reuse. The same company in Beerse, Belgium implemented a wastewater and rainwater recycling plant yielding an annual savings of 150,000 cubic meters of drinking water, equivalent to the annual water usage for the entire Janssen Beerse site. (See Exhibit F: page 27 and page 29.)

At Johnson & Johnson, SH&E commitment and accountability start at the highest level of the Corporation: the Office of the Chairman. Also at the top corporate level is the Public Policy Advisory Committee (PPAC) of the Board of Directors. The PPAC oversees the Company's policies, programs and practices on public health issues regarding the environment and the health and safety of employees. This committee includes three board members and the Corporate Compliance Officer. Technical Resources & Compliance (TRC) provides leadership, support and consulting services to operating companies around the globe. (See Exhibit F: page 3.)

Johnson & Johnson has policies that go beyond regulatory requirements to ensure the health and safety of its employees. In 1999, Johnson & Johnson established a Policy on the Employment of Young Persons, which applies to both internal manufacturing facilities and to our contract manufacturers worldwide. The policy applies to the employment of persons under the age of 18, and contains provisions addressing age, health and safety, hours, laws and regulations in compliance with the health, safety and morals provisions of the International Labour Organization convention 138 Concerning Minimum Age. (See Exhibit H: Policy on the Employment of Young Persons.)

Johnson & Johnson recently instituted a Climate Friendly Energy Policy as a formal statement of the principles under which our energy program has operated for many years. The policy includes a summary of the present situation, recognizing that global warming is a significant international issue and acknowledging that corporations have a responsibility to reduce emissions of greenhouse gases such as carbon dioxide (CO₂). The corporation recognizes that global climate change has the potential to create serious problems for the environment, the economy, and communities around the world, and has set aggressive CO₂ reduction goals accordingly – four percent reduction by 2005 and seven percent by 2010. These are absolute goals measured against the 1990 baseline, not normalized to production or sales. Given Johnson & Johnson's significant growth over time—in terms of sales and production volume—

these are some of the most challenging energy goals within the industry. (See Exhibit I: Climate Friendly Energy Policy.)

Linkage Between SH&E and Productivity

The linkage between SH&E and productivity is very evident in Johnson & Johnson's Technical Resources & Compliance (TRC) Mission: *Create competitive advantage for the Johnson & Johnson operating companies through a strategy of Beyond Compliance.* To support this, TRC created five Strategic Areas of Focus to help achieve specific goals by 2009. (See Exhibit J: Technical Resources & Compliance Strategic Plan.)

Johnson & Johnson's drive to be the best influenced the corporation's senior leadership to embrace a philosophy of Beyond Compliance for SH&E in the mid-1990s. The Beyond Compliance approach creates competitive advantage for Johnson & Johnson. So powerful is this approach that it was recently adopted as a Johnson & Johnson management imperative for all business aspects.

A "Beyond Compliance" company:

- Meets all Johnson & Johnson standards and regulatory requirements.
- Optimizes products, processes and facilities by designing in quality, safety, engineering and environmental standards.
- Partners with regulators and other external stakeholders to anticipate and influence changes in regulations, standards and public expectations.
- Achieves Operational Excellence.

In pursuit of Beyond Compliance, Johnson & Johnson established the Management Awareness and Action Review System (MAARS). Initiated in 1998, MAARS is the global process for ensuring SH&E compliance, going beyond regulatory requirements and reducing risk, providing operating companies with tools to assess SH&E performance and drive continuous improvement. Each facility conducts a self-assessment annually and develops a Management Action Plan (MAP) based on the results. The operating company's business leader reviews and approves each MAP, demonstrating senior-level awareness of the issues and commitment to improvement actions. Corporate staff reviews the plans and conducts facility joint assessments at least once every three years. The assessments measure adherence to Johnson & Johnson's global standards and management system requirements, covering the full suite of SH&E issues. (See Exhibit K: MAARS Process Guide.)

Leading indicators and forward thinking are essential for Beyond Compliance. Sample productivity gains include the following:

Design for Environment Delivers \$2 Million Annual Savings. The Design for the Environment (DfE) process uses a computer-based tool to rate processes based on environmental factors, such as energy use, water use, hazardous material requirements, process efficiency and yield, and non-product generation. By making sound decisions early in the process, performance is improved while minimizing costly retrofits to address environmental problems that may arise later. Janssen Pharmaceutica Products applied DfE tools to the development of a second-generation manufacturing process of Risperidone. Both raw materials consumption and waste generation were cut in half, representing \$2 million in annual cost savings. (See Exhibit L: Johnson & Johnson 2003 Sustainability Report, page 34-35.)

Health Risk Assessment (HRA) and Intervention Program Saves \$225 Annually per Employee. Nearly 20,000 people participated in a comprehensive wellness program offered to Johnson & Johnson employees. The program achieves savings of about \$225 per employee per year (\$9-10 million total) primarily from reduced medical utilization (\$4 million) and lower administrative expenses (\$5 million). (See Exhibit M: "Employee Health Contributes to Corporate Financial Health at Johnson & Johnson," *Journal of Organizational Excellence*, Winter 2004.)

Ergonomics Improvement Yields 20% Productivity Gain. Janssen-Cilag Mexico applied Process Excellence concepts to reduce ergonomics risk on a manual packaging line. The company focused on biomechanics and task organization to eliminate postural problems, reduce repetitiveness, and improve task variability. The "packaging cell" solution resulted in an ergonomics risk reduction of 48 percent, productivity improvements of 20 percent, and an annual cost savings of \$50,000. (See Exhibit N: Project Summary Form.)

Recycling Saves Millions of Dollars in Brazil. Johnson & Johnson Brazil in São José dos Campos developed an innovative program for recycling industrial wastes. Before implementing the program, the facility generated approximately 3,800 ton of manufacturing waste per year that was sent to landfills. By viewing this waste as potential raw materials, the facility identified numerous possibilities for reuse: sanitary napkin waste to manufacture insoles for shoes, diaper waste to create brake lining, and toothbrush and cotton swab waste to produce plastic wood. Since 1996, recycled waste increased from 42 to 73 percent, and the amount of waste sent to landfills was reduced from 57 to 20 percent. Through selective waste reduction, recycling and reuse, the facility realized \$1.1 million in raw material and waste disposal costs in 2003 alone. (See Exhibit L: page 46.)

SH&E Management System

Management leadership and commitment

In its effort to keep its groups aligned and focused on achieving results, Technical Resources & Compliance developed the Five Strategic Areas of Focus and an accompanying Strategic Plan shown in Exhibit J: That Plan is broken down further into a Strategy Cascade that outlines specific targeted results for 2005, 2007 and 2009. Achieving those measurable results requires management leadership commitment from all levels of Environmental, Health & Safety personnel.

The SH&E Management System has strong leadership and commitment from all levels of the corporation, worldwide. Safety initiatives typically include a member of the Executive Committee serving as “Worldwide Champion” of the initiative. For example:

- Michael Dormer, Worldwide Chairman, Medical Devices & Diagnostics champions the machine safety, ergonomics and SAFE Fleet initiatives; the “Safe Decisions for Life” campaign; and he heads the Johnson & Johnson Health & Safety Leadership Team.
- Russ Deyo, Vice President and General Counsel champions Healthy People 2005.
- Bob Darretta, Vice Chairman of the Board of Directors, Chief Financial Officer, champions the environmental program.

A requirement of serving as Champion is to be actively involved in leading, motivating and monitoring the SH&E effort in a highly visible way. For example, in the SAFE Fleet initiative, the champion presents his accident reduction vision each year in a video, and attends regional “Champion Conferences.” Regional Chairmen acknowledge monthly or quarterly data reports with letters that encourage specific improvement areas. A Task Force—led by a Vice President of Sales—holds monthly conference calls in which any SAFE Fleet participant may join, and distributes an Executive Update to Johnson & Johnson executives. (See Exhibit O: SAFE Fleet Executive Update, January 2005.) Regional Sales Managers include safe driving objectives in their performance reviews with sales associates. District Sales Managers ride along with their sales associates at least twice per year to assess driving performance.

Organizational communications and system documentation

To ensure a consistent deployment of standards and guidelines, Johnson & Johnson instituted an electronic SH&E Document Management System. It enables complete on-line management of quality controlled health and safety documents from the process of generation, through distribution to the end of their life cycle. The on-line review and approval by internal customers yields higher acceptance of the content by operating companies.

Johnson & Johnson has a very strict SH&E Operating Procedure to ensure consistent and accurate record keeping. Employees are required to report all work-related injuries and illnesses to their supervisor and site health care provider. Health services representatives diagnose, provide or recommend treatment, and feed information back to the designated record keeper. (See Exhibit P: GOP-WW-015, Records Management.) [Additional details on this process are included in the Performance Measurements and Information Management section.]

Safety information is communicated upward by a number of communication vehicles, including an annual Public Policy Advisory Committee report, an Environmental Health & Safety Sustainability Report (See Exhibits F and L), and quarterly SAFE Fleet Executive Updates (See Exhibit O).

Employees have access to safety information anytime. The Johnson & Johnson Health & Safety and Environmental Affairs websites post information as it becomes available. A quarterly newsletter, *focus*, is published on the website and in hard copy. Regional Health & Safety staff publishes newsletters and maintains websites for their areas, often translating items of interest into local languages. (See Exhibit Q: *news + views* and *focus* (Q3 2003-Q4 2004).)

Certain safety efforts that are deemed applicable to all Johnson & Johnson associates and their family members are given a great deal of visibility. For instance, the *Safe Decisions for Life* campaign, created to emphasize hand safety, launched programs around the globe, with senior leader introductions and fairs for employees and their families. The second campaign on Fall Prevention was launched in early 2005, with user-friendly materials targeted not only at employees but family members as well. (See Exhibit R: Walk Safe! Walk Smart! Seven Steps to Fall Prevention.)

Assessments, audits, evaluations, and continuous improvement

The current worldwide SH&E management system is aligned with the ISO 14001 environmental management system standards, OHSAS 18001, and other systems such as OSHA's Voluntary Protection Program. At year-end 2004, 97 percent of our manufacturing and R&D facilities have received third-party

ISO 14001 certification.

The Management Awareness and Action Review System (MAARS), which measures the extent to which Johnson & Johnson is beyond compliance in various SH&E areas, is described in the Linkage Between SH&E and Productivity section of this document. Case studies in that section also describe how continuous improvement efforts have yielded positive results.

MAARS is supported by an on-line assessment tool known as TRAC, which stands for Total Risk Assessment and Control. During the self-assessment phase of MAARS, companies complete an online questionnaire to determine status of compliance with government regulations and corporate requirements. Single-click hyperlinks take users to Johnson & Johnson policies, best practices and subject matter experts. Compliance gaps and corrective action steps are automatically captured in a Management Action Plan (MAP), which is transmitted electronically to affiliate and corporate management worldwide.

Another risk assessment system that feeds into MAARS has been developed specifically for industrial hygiene processes. The Chemical Hygiene Assessment Reporting Tool (CHART) provides a way to document industrial hygiene risk assessments in full compliance with our standard operating procedures. The tool automatically generates the sampling plan, based on the exposure severity or the most recent sample result. It ensures standardization of the risk assessment method, enabling objective comparisons across similar tasks within the corporation.

Process Excellence tools are woven into all SH&E efforts. As of 2004, over 20 SH&E professionals received Green or Black Belt Certification, with their projects generating over \$2 million in savings or cost avoidance for Johnson & Johnson.

By setting standards and surpassing goals, our environmental efforts have achieved distinction and earned the respect of both government and economic experts. As an example, the Environmental Protection Agency has classified 40 out of our 49 major U.S. facilities as Performance Track members. That's an impressive 82 percent participation rate. In the past year, the EPA also created the Performance Track Corporate Leader designation. This honor is bestowed upon organizations that demonstrate environmental excellence and commitment toward proactive initiatives that go beyond compliance. Johnson & Johnson was recognized as one of the first three companies in the country to receive this distinction.

Hazard recognition, evaluation, and control

The MAARS process not only feeds and measures SH&E efforts, but also motivates improvement. One example is with Tibotec-Virco, a pharmaceutical company that focuses on research for the diagnosis

and treatment of HIV infection. Acquired by Johnson & Johnson in March 2002, it carried out a facilitated MAARS self-assessment that September. A total of 605 issues were identified on the initial MAP: 338 safety, 147 health, and 120 environmental. The company was given one year to set up an SH&E program to meet Johnson & Johnson standards. By November 2003, 90 percent of the issues were closed. In a one-to-five rating system (“five” being the best), Tibotec-Virco achieved a four rating for both Health and Safety and a three rating for Environment. The assessors made particular note of how closely the three areas cooperated with one another, and how involved people were in the process from all areas and levels of the organization. (See Exhibit S: Tibotec & Virco, Belgium: 1st Rated MAARS Assessment.)

Workplace design and engineering

The best example of excellence in workplace design and engineering is the Safety Through Design process as applied to machine safety risks. This process requires early involvement by the designer to identify the many operating and maintenance points so that panels, doors and safety tunnels have free access while complying with the company policy of “Zero Access”™: *No employee will be able to come into contact with, either accidentally or intentionally, a dangerous moving part during normal or abnormal conditions.*

The Safety Through Design process that incorporates risk reduction from the start is the impetus behind a tool developed by Technical Resources & Compliance to use “the professional expertise and experience of their company’s quality, health and safety, environmental, and sterilization service colleagues in a partnership that enhances speed to market opportunities and provides potential cost reduction by getting all involved early in the process.” (See Exhibit T: Product & Process Development Things to Consider Implementation Guide.) [NOTE: TRC was called the Technical Resources Group or TRG when the guide was published.] It guides organizations on what should be considered to design EH&S concepts into various stages of development:

- **Discovery:** Initial determination of product concept and nature, function, market, market scope.
- **Pre-Clinical:** Initial formulation/prototype developed.
- **Clinical:** Testing of formulation/product in humans.
- **Scale-up and Manufacture:** Pilot Plant manufacturing; validation runs; full production.

One of the greatest health and safety challenges has been reducing ergonomics injuries and illness. Ergonomics-related symptoms can occur from at-work and at-home activity. The difficulty in identifying the exact cause of ergonomics symptoms such as repetitive strain, cumulative trauma and overexertion led Johnson & Johnson to develop ERGO, the worldwide ergonomics initiative, in 1995. Johnson & Johnson companies around the globe are required to implement a six-step process to achieve an “Ergonomics Culture.” Facilities must mature in such a way that ergonomics awareness, management and prevention become part of the site’s culture. It took nine years for a company to meet the stringent requirements of ERGO’s Step 6. Janssen Pharmaceutica in Geel, Belgium became the first facility to pass the verification audit, to clearly demonstrate that an ergonomics culture exists at all levels, and to achieve our coveted Johnson & Johnson Ergonomics Culture Award as a result.

Our ERGO process is so highly respected, that on July 22, 2003 Johnson & Johnson was welcomed into a three-year strategic partnership in ergonomics with OSHA. The purpose of that partnership is to offer OSHA firsthand knowledge of Johnson & Johnson ergonomics programs. The joint goals include: reduce the incidence and severity of musculoskeletal disorders, identify best practices, and share them with other Johnson & Johnson facilities, other industries and the public. (See Exhibit U: OSHA Up to Date, page 1.)

Operational SH&E programs

Johnson & Johnson’s partnership with Federal Express, and its outreach to three U.S. regulatory agencies, generated a protocol that makes it easier and safer to ship used health care products. The protocol was incorporated in the Department of Transportation’s (DOT) Federal Register with full support from the Centers for Disease Control and Prevention and the Occupational Safety and Health Administration. The DOT revised its regulations pertaining to infectious substances, creating a new category of shipments called Used Health Care Products, which can be shipped without the stringent packaging, training, and documentation previously required when they were classified as Hazardous Materials. This new regulation saves not only Johnson & Johnson, but other companies transporting Used Health Care Products, millions of dollars annually in packaging costs and transportation surcharges.

Across the globe, Johnson & Johnson facilities have implemented extremely successful operational programs to support SH&E. One targeted area is Contractor Safety. Standard operating procedures are in place to address the safety of contractors, construction workers, and temporary employees. Contractors are required to be trained in the same health and safety practices in which any full-time employee in the same position would be trained. Similarly, there is a process in place for incident investigation and

treatment that parallels that for our employees. (See Exhibit V: SOP-WW-S-005.00, Contractor Safety Management Program.)

The Johnson & Johnson Health Services and Resources organization integrates disability management, occupational health, employee assistance, work-life programs, wellness and fitness. Its vision is to optimize the health, well-being and productivity of Johnson & Johnson employees. It is an outgrowth of Johnson & Johnson LIVE FOR LIFE®, which originated in 1979 and brought together experts in health education, behavioral change, and disease management to improve employee health and productivity. The program underwent transformations in the past two decades to respond to changing business requirements and employee health needs. The cornerstone of the enhanced health promotion initiative is the Health Risk Assessment and Intervention Program, described in the Linkage Between SH&E and Productivity section of this document. (See Exhibit W: Johnson & Johnson Live for Life Program: Now and Then (article in *American Journal of Health Promotion*).)

Employee empowerment and involvement

In 1995 Johnson & Johnson established several teams of professionals to develop initiatives targeting high-risk areas. The project teams for each of the programs included members from the intended target audience, ensuring that the user perspective was considered in the development of each initiative.

Today, this approach is used in every Johnson & Johnson safety initiative. For instance: the ERGO team is comprised of operators and representatives from safety, health, production, plant management, and engineering. The Fall Prevention program requires a team comprised of an operator, engineer, facilities manager, operations manager, and a safety professional. The cross-functional SAFE Fleet team includes tenured drivers (sales, service), sales management, human resources, administration and a fleet liaison. With all safety initiatives championed by a senior level manager, safety team members seek out involvement on a team, and champion the effort with their peers.

There may be no greater example of employee involvement than site associates choosing to participate in OSHA's Voluntary Protection Program (VPP). This process awards sites that achieve exemplary occupational safety and health as determined by a strict assessment process. The average VPP worksite has a lost workday incidence rate 52 percent below the average for its industry. These sites typically do not start out with such low rates. Reductions in injuries and illnesses begin when the site commits to the VPP approach to safety and health management and the challenging VPP application process. Four Johnson & Johnson sites have earned Star status, the highest level of achievement.

Plans for implementing VPP (and other international health and safety accreditations) are critical to achieving TRC's Strategic Area of Focus #5 in which we seek to be rated within the top 10% of targeted corporate social responsibility indices and polls (See Exhibit J). There is a commitment for outstanding working partnerships with critical NGOs, standards/policy setting organizations and government agencies. Specifically, one of the 2005 goals for Worldwide Health & Safety is acceptance into the Corporate VPP. Reid Holbrook, an Industrial Hygiene Specialist at Johnson & Johnson's Noramco was recently designated a Special Government Employee (SGE) as part of OSHA's Voluntary Protection Program. SGEs are employees of VPP participating sites who have occupational safety and health expertise. (See Exhibit X: U.S Department of Labor certification.)

Motivation, behavior, and attitude

McNeil Consumer has a highly developed safe behavior program in all of their manufacturing operations. Its strength is rooted in strong, visible management support. Tom Lapinski, Vice President of Operations, champions safety, and specifically safe behavior, at not only safety leadership meetings, but cross-functional meetings as well. At a monthly meeting in which different areas present their progress toward measurable goals, Tom talks about safe behavior, and the participation level of their peer-to-peer observation program. Safe behavior in the manufacturing environment is an underlying theme at McNeil facilities in Pennsylvania, Canada, and Puerto Rico. The program has also been adapted for McNeil's laboratory facilities.

Johnson & Johnson is regularly voted one of the top employers and best places to work for women, being named #9 on Fortune's 2004 Most Admired Companies list and ranked as the number one company in the annual survey's Pharmaceuticals category. Johnson & Johnson made the Top 10 Best Companies for working Mothers list in Working Mother magazine. An annual reputation poll from Harris Interactive and The Reputation Institute for 2004 cited Johnson & Johnson for having the best corporate reputation in America for the sixth consecutive year, since the inception of the survey. *Occupational Hazards*, the leading magazine of safety, health and loss prevention, has included Johnson & Johnson in its list of the 16 Safest Companies in America for 2003. The recognition goes to companies with beyond-compliance safety and health commitment as recognized by industry professionals, participation in OSHA's Voluntary Protection Program, state and local awards, and Occupational Hazards' research into the company's occupational health and safety philosophy and programs. (See Exhibit Y: "The Shiniest Reputations in Tarnished Times," *Fortune Magazine*; "Family Champion, Best 100 Companies to Work for 2004," *Working Mother*; "Staying on Top," *Business Week*; "60 Years of Safety Vision," *Occupational Hazards Magazine*)

Employees thrive in an atmosphere that openly demonstrates, and invests in, their health and safety. A great motivator for employees to take care of themselves on and off the job is the variety of health and wellness programs that offer employees a wide range of creative and innovative services and activities. The Online Health Profile program is an interactive, confidential health risk assessment conducted every two years, and includes professionally collected biometrics (blood pressure, weight, height, total cholesterol, blood sugar, etc.), immediate feedback, action planning and links to other health resources.

Through the CareConnect program, employees can receive lifestyle counseling from a registered nurse to help reduce modifiable health risks such as smoking, cholesterol and high blood pressure. These intervention programs are based on a stages-of-change model that has proven to be effective in reducing such risks. Preventative screening programs are offered for mental health and cancer (skin, oral, prostate and breast cancer). Internet based programs include a variety of health topics on fitness, weight loss, nutrition, cholesterol reduction, blood pressure management, smoking cessation and cancer education. JOBFIT™ is a preventive program designed as a wellness component in the management of our musculoskeletal injuries and illnesses. Wellness Centers are available at over 30 locations, offering a wide range of cardiovascular and strength-training equipment and exercise classes. For employees who travel frequently and for field-based employees, a travel workout program is offered and an exercise reimbursement program that can be applied to membership costs for activity programs. (See Exhibit Z: Choices 2005, Healthy People Better Future, CareConnect (brochures).)

Safety and industrial hygiene professionals participate in the Johnson & Johnson Engineering Leadership Development Program (ELDP). Technical leaders volunteer their time to help ensure the engineers of the future are equipped to build safety, health and environment into the processes they touch.

Employee competency-building

An induction process has been established to rapidly integrate new SH&E professionals into Johnson & Johnson. Piloted in Europe, it is developing into a worldwide process that assures incoming SH&E professionals receive essential information and carry out key activities in their first year. Tenured SH&E staff members deliver an induction program within two weeks of their start date. This facilitates a positive attitude about a new employee's initial steps with Johnson & Johnson, an ability to assimilate SH&E programs quickly, and a focus on risk reduction during the transition. The core competencies required for SH&E professionals at Johnson & Johnson were identified in a study using a 360-degree feedback survey, and include business and technical competencies (e.g., risk assessment, leadership and teamwork, ergonomics knowledge, communication).

Competency building is facilitated by the use of electronic learning (e-Learning). Classroom training is expensive and time consuming. More importantly, our internal customers say that the inconvenience of having to travel to a class and wait for enough people to register makes it difficult for them to learn what they want, when they want it. Electronic learning is readily available worldwide. For example:

- Recent e-Learning modules include process safety management, lockout/tagout, radiation safety, and international blood borne pathogens. A New Employee Orientation to Office Safety is an online training program for all new Johnson & Johnson administrative employees. In the one-hour program, they are made aware of the SH&E risks they may face in their office role (fires, ergonomics, falls, machines, chemical, air quality, housekeeping, safety team participation).
- Thirty-two active e-rooms are used to post information, develop and approve policies, share best practices, and update on legislation.
- WebEx virtual meeting space allows people from all around the world to hold meetings from their desktops.

Improving employee competency using electronic methods has had an outstanding positive impact on productivity associated with training. A Johnson & Johnson Process Excellence project revealed that e-Learning reduced training time per employee 50 percent for office ergonomics and 72 percent for basic ergonomics in the European region alone. (See Exhibit Q: news + views 4th Quarter 2003, page 4.)

Performance Measurements and Information Management

SH&E results are summarized for management on a scorecard called a “dashboard,” named for the instrument in a car that gives simple, rapid information on performance. (See Exhibit AA: Johnson & Johnson Health & Safety Measures.)

The dashboard includes both leading and lagging indicators, reporting progress as “green” (on target), “yellow” (caution), or “red” (immediate attention required). Johnson & Johnson uses dashboards to assess critical areas for improvement. SH&E measurement dashboards include: Critical Few Outcomes, Next Generation Goals (environment), Comprehensive Safety for each MAARS site, and individual dashboards for Ergonomics, Machine Safety, SAFE Fleet, Industrial Hygiene, and others (see above). The data collection system has undergone continuous improvement over time, incorporating new technologies to make reporting easier and timelier. Underlying all efforts is the identification of cause so as to prevent future incidents.

An excellent example of continuous improvement and innovation in this area is the introduction of the on-line Incident Reporting and Investigation (IRI) tool. The combined reporting and investigation process began in 1996 with Learning to Look™, a post-incident step-by-step process designed by Johnson & Johnson to identify root cause. Computer programs and internal tracking systems now enable associates all over the globe to report incidents and investigation results using one comprehensive tool: the IRI system. All Johnson & Johnson sites must report via the on-line IRI tool, providing information to Johnson & Johnson World Headquarters within 72 hours of the incident. After the business leader has approved the 72-hour report, notification that the report is approved and available for review is sent to the Company Group Chairman, Vice-President and Directors of Health & Safety, and subject matter experts. The on-line IRI must be completed within 10 days, including a fault-tree analysis of cause, corrective action plan, and costs associated with the incident. In addition to generating monthly summary reports, the IRI system enables Johnson & Johnson associates to access any field in the application at any time. As such, they can review events and trends by region, company, site, and any of the IRI fields.

Johnson & Johnson has a General Operating Procedure that requires sites to identify key performance parameters of its safety performance includes those that determine whether:

- Safety & Industrial Hygiene policy and objectives are being achieved;
- risk controls have been implemented and are effective;
- lessons are learned from Safety & Industrial Hygiene Management System failures, including injuries, illness and near-incidents;
- awareness, training and communication for employees and interested parties is effective;
- information that can be used to review and/or improve aspects of the Safety & Industrial Hygiene Management System is produced and used.

Required measurements and tracking methods include:

- hazard identification, risk assessment and risk control process results;
- systematic workplace inspections using checklists or observations on a “walk-through” basis;
- prior evaluations of new plant, equipment, materials, chemicals, technologies, processes, procedures or work patterns;
- inspections of specific machinery (e.g., machine guards) to check that safety-related parts are fitted and in good condition;

- industrial hygiene sampling: measuring exposure to chemical, biological or physical agents (e.g., noise, volatile organic compounds, etc.) and comparing with recognized standards.
- behavior sampling: assessing workers' behavior to identify safe work practices;
- benchmarking against safety and industrial hygiene practices in other organizations;
- surveys on employee attitude toward the Safety & Industrial Hygiene Management System, safety and industrial hygiene practices, and employee participation processes;
- costs associated with injuries, illness and property losses;
- results of regulatory agency inspections.

(See Exhibit BB: GOP-WW-014.00, Safety & Industrial Hygiene Performance Measurement and Monitoring.)

A key leading indicator that drives SH&E program performance is Johnson & Johnson's Healthy People 2005 initiative. It is rooted in the recognition that the health of the individual is inseparable from the health of the corporation. Studying our Health Profile data from 1995-1999, Johnson & Johnson has identified four quantifiable health factors that will improve our employees' health and reduce our health care costs: smoking, high blood pressure, elevated cholesterol and physical inactivity. (See Exhibit D)

Best-in-class health and wellness programs have been identified to target these four areas. Our health professionals are gathering anonymous, aggregate data from ongoing employee Health Profile Assessments to generate company-specific results, which in turn we use to design initiatives that best serve the needs of each operating company population. Combined with several other health education and prevention programs offered by Johnson & Johnson Health & Wellness professionals since 1978 (e.g., Live for Life, CareConnect, JOBFIT™, preventive screen, wellness centers), the goal is to help employees reach their personal targets before they get sick. (See Exhibit M for more information on how health risk has been reduced due to these Johnson & Johnson behavioral change interventions.)

SH&E Results

Johnson & Johnson has demonstrated consistent improvement on and commitment to SH&E results over time. Safety and health indicators are described in the Performance Measurements and Information Management section of this document and throughout the Johnson & Johnson 2004 Sustainability Report. (See Exhibit F) Particularly noteworthy are:

- Summary of Key Indicators on page 2 which shows the progress since 2001 in various incident rates, certifications, regulatory compliance, use of resources, and output.

- Worldwide Fleet Rates on page 13, showing a 40 percent reduction in accidents per million miles driven over the past decade. This reduction is particularly outstanding because headcount increased 51% and the number of fleet cars increased 139% during that time period.
- Worldwide Safety Rates on page 15, showing consistently downward trend lines for lost workday case rates, severity rates, serious injury/illness rates, fleet rates and fires.
- The Healthy People 2005 Targets and Progress on page 17, showing an improvement in corporate health in four critical areas: inactivity, smoking, cholesterol and blood pressure.
- Management and Operational Performance on the Next Generation Goals (NGGs) on pages 25 and 27 respectively, showing the progress toward achieving and sustaining an environmentally friendly corporation. Johnson & Johnson's leading indicators for environment are the management performance indicators of our NGGs, which drive our environmental improvements. These goals promote integration of environmental management with business decisions, and are reported annually. Indicators include: implementation and certification of environmental management system to ISO 14001 standards, environmental assessment of new products/processes/packaging during early development; and development and implementation of a site-based community outreach plan.
- Environmental Costs & Cost Savings on page 32, showing a strong business case for our environmental programs.

As mentioned previously, the EPA has honored Johnson & Johnson as a Performance Track Corporate Leader. Additionally, Johnson & Johnson has earned inclusion on the Dow Jones Sustainability Index, marking Johnson & Johnson as a sustainability leader and providing the opportunity to help establish the benchmark of current standards. And Johnson & Johnson continues to enjoy a triple-A rating from Innovest Strategic Advisors. Not only is this the highest rating given by Innovest, but it is also a testament to our Credo belief that by operating according to high standards of corporate social responsibility, our shareholders will indeed realize a fair return.

Specific key Health, Safety and Environmental certifications reported in the EHS Sustainability Reports over the past two years (See Exhibits F and L) include:

- 97% of facilities third-party ISO-14001 were certified by year-end 2004.
- Tasmanian Alkaloids in Westbury, Australia achieved dual certification under the Occupational Health & Safety Assessment Series 18001 and Australian Standard 4801, with zero non-conformances identified during the facility audit.
- Three plants achieved third-party certification in 2003 to OHSAS 18001: Cordis Warren,

New Jersey; DePuy Ireland; Centocor Leiden, the Netherlands

- The corporation exceeded the goal in reduced energy use by achieving a 2.4% decrease in absolute CO2 emissions from 1990-2004.
- 99% of new products, processes and packaging were reviewed for environmental impact in 2004.
- Already a U.S. policy, the smoke-free workplace policy will be extended worldwide in 2005.

Other Factors

Challenges

Johnson & Johnson's corporate-wide attention to achieving beyond compliance results fosters a number of business challenges that keep us continually improving our assessment and improvement processes. Key challenges include the following:

Technological changes and evolving social needs require continuous attention to sustainable growth. Our Credo values demand that as the corporation grows, Johnson & Johnson continues to harness renewable energy resources, provide safe and healthy workplaces, and improve the quality of life for employees and customers.

Johnson & Johnson is a global organization with culturally diverse employees, partners and customers. Communicating and instilling the corporate values that make up Our Credo is an ongoing challenge. SH&E programs and processes must be developed in ways that allow cultural and language adaptations efficiently and cost-effectively. One example of an SH&E diversity challenge is providing fleet safety materials for the Asia-Pacific region. Fleet safety programs and processes are designed to reduce fleet-related incidents by those Johnson & Johnson associates driving vehicles as a primary part of their job (e.g., sales, service reps). In Asia-Pacific, 20 percent of Johnson & Johnson associates drive two-wheelers. In that same region, 40 languages and 300 dialects are spoken.

Johnson & Johnson's business strategy involves the acquisition of new companies. With that comes the challenge of instilling SH&E programs and processes into those companies. Since 2001, Johnson & Johnson has acquired more than 20 companies. Our Credo values about employee health, safety and environmental protection are typically beyond those of the companies acquired, necessitating a concentrated integration effort.

Conclusions and Recommendations

Coordinating SH&E efforts requires cooperation across disciplines, customer education, and sophisticated measuring and tracking systems. But the return on investment is great. Johnson and Johnson is capable of identifying risks before they lead to incidents. SH&E professionals are able to demonstrate business cases to senior managers that elicit their support for SH&E initiatives. Internal customers see that SH&E can add value to their manufacturing and research and development activities.

Johnson & Johnson has always acted on the belief that providing a healthy and safe work environment is good business. It is good for our employees, our customers, and our communities. That is clearly explained in Our Credo, and all Johnson & Johnson associates are held accountable to demonstrating their commitment to that belief.

In earlier years, Johnson & Johnson took an approach to SH&E that was program-based. Safety, health and environmental programs were developed or acquired to meet regulatory requirements. The Beyond Compliance focus, has taken SH&E efforts to the next level. That meant programs were integrated into the work processes, identifying early signs of potential trouble, and addressing them before there were consequences. It also means leveraging expertise in the related disciplines of safety, health and environmental protection to ensure internal customers were making improvements that enhance their productivity rather than hinder it.

Johnson & Johnson SH&E processes are state-of-the-art. Results are world class. An integrated approach that strives for Beyond Compliance in the safety and health of our employees and the communities in which we work has a payoff that goes beyond leading and lagging indicators.