World Class Environmental, Health and Safety Case Study of Schneider Electric North America

Submitted by:
Schneider Electric North America

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A. Executive Summary

Organizational Overview

Schneider Electric, based in Paris, France, is a global specialist in energy management with operations in over 100 countries. Schneider Electric offers integrated solutions across multiple market segments, including leadership positions in energy and infrastructure, industrial processes, building automation and data centers/networks, as well as a broad presence in residential applications. Focused on making energy safe, reliable, efficient, productive and green, the company’s 114,000 employees achieved 2008 sales of $23 billion, through an active commitment to help individuals and organizations “Make the most of their energy.”

The North American Operating Division (NAOD), headquartered in Palatine, Ill., markets brands of Schneider Electric to customers in the United States, Canada and Mexico. NAOD has 19,000 employees who generated $3.6 billion in sales in 2008. This submission focuses on the EHS efforts of NAOD.

Overview of Environment, Health and Safety at NAOD

Environment, health and safety, along with community, are the guiding principles of our organization. Our people are our most important asset and therefore their safety and health is our top priority. We want our people utilizing safe practices, being environmentally conscious and being healthy at work, home and at play.

Leadership Commitment

It begins with management commitment. Our current president and CEO of NAOD, Chris Curtis, includes a safety and health message or review in of his all company-wide communications. He also pushes all levels of the organization to be the safest and healthiest workforce in the industry and to continue to give back to local communities. This message is echoed by COO, Amy Huntington, who also is driving us to toward our ultimate goal of zero accidents, as well as be a more energy efficient organization. George Powers, senior vice president of Human Resources, leads our healthy lifestyles initiative, which required each manufacturing, logistics and large office locations to implement a healthy lifestyles program by May 2008.
Internal Efforts

Because compliance is a minimum standard, a continuous improvement model utilizing seven major categories was developed. The categories include: safety and environmental policy, procedures, training, employee involvement, audit, communication and recognition and management commitment.

Environmental, health and safety communication and measurement are a part of our company’s organizational model and are in effect at all levels of the company. One example is the monthly corporate newsletter “Safety & Environmental Updates,” (Attachment 1) that compiles and communicates data by location and business division. This communication vehicle is used to track both pre-loss and post-loss goals. Other key initiatives include: 12 hours of safety and environmental training per employee per year for operations and services employees; Off-the-Job Safety Initiative (healthy lifestyles and safety-at-home program for all employees); SafeStart (on and off the job training for all operations and services employees); and on-line safety training (all office employees are given annual training requirements utilizing Coastal Technologies’ interactive training courses). In addition we strive to reduce the environmental impact of our products and their entire life-cycle, particularly through eco-design and eco-production.

External Efforts

In addition to addressing the health and safety of our employees, NAOD reaches out to the community, further demonstrating a beyond-compliance approach to human and environmental responsibility. Many NAOD sites are involved in voluntary safety or environmental certification programs. Currently all 33 of our manufacturing and logistic sites maintain ISO 14001 certification. As of May 2009, 10 sites have received OHSAS 18000 certification and all manufacturing and logistics sites will be registered by the end of 2010. All NAOD facilities have completed certification for Customs-Trade Partnership against Terrorism (C-TPAT) — a voluntary process to ensure the safety of employees and products during the transportation cycle. NAOD also uses May, National Electrical Safety Month, to reach out to communities to conduct electrical safety training, and June, Home Safety Month, to encourage employees to make their homes and families safer. NAOD actively participates with industry sector organizations like National Electrical Manufacturers Association (NEMA) to promote continuous
improvement in product and workplace safety standards and practices.

Results

The best evidence of NAOD’s commitment to environment, health and safety is in the results.

Schneider Electric set an objective to reduce energy consumption by 10 percent per employee by the end of 2008 based on 2004 use. NAOD achieved energy reduction of 22 percent by the end of 2008 based on 2004 use and avoided an estimated 46,000 tons of carbon dioxide emissions. NAOD core operations (USA plants) also improved waste recovery by nearly 16 percent between 2005 and 2008, resulting in 32,300 tons of manufacturing waste being diverted from landfill disposal in 2008.

Schneider Electric also implements health awareness through encouraging employee participation in a health assessment, which minimizes employee health risk factors. Each location achieved 60 percent participation in the health assessment. Based upon an internal survey conducted by NAOD, 72 percent of employees report that the company’s culture is supportive of healthy lifestyles.

While NAOD’s injury statistics were consistently better than their industry average in 2003, the company determined that to build a culture of safety throughout NAOD it needed to initiate a plan and set aggressive goals beyond industry standards. Since 2003 there has been a 71 percent improvement in the Medical Incident Rate (MIR) similar to the OSHA recordable rate, a 65 percent improvement in Lost Time Accident Rate (LTAR), and a 67 percent improvement in the Lost Time Day Rate (LTDR). This translates to an outstanding result of 353 fewer injuries in 2008 compared to 2003.

Executive Summary Conclusion

NAOD recognizes that stakeholders include the people, customers and the communities in which it operates. NAOD’s people are instrumental in the success of the safety, health and environmental program, and this success influences its reputation in the marketplace to customers and the community. By driving beyond compliance and integrating a comprehensive continuous improvement program, NAOD has driven dramatic results. We continue to improve because our ultimate goals are to have no one injured on or off the job, to have the healthiest workforce in the world, and to have no adverse environmental impact to the communities in which we operate.
1. Business Profile

As a global specialist in energy management with operations in more than 100 countries, Schneider Electric offers integrated solutions across multiple market segments, including leadership positions in energy and infrastructure, industrial processes, building automation, and data centers/networks, as well as a broad presence in residential applications. Focused on making energy safe, reliable, efficient, productive and green, the company’s 114,000 employees achieved sales of more than $23 billion in 2008. (Financial data-Attachment 3)

Consistent with its principles of responsibility, work-related risk prevention is one of Schneider Electric's priorities. Schneider Electric aims to be one of the companies with the lowest occupational accident frequency rate and become an international benchmark of safety standards. The challenge is to develop a culture and a uniform safety management system throughout all the entities in the Group, whilst at the same time adapting the global policy to local contexts and capitalizing on best practices and initiatives.

As a pioneer in the new environmental economy, Schneider Electric is an active participant in the process of sustainability and the need to balance our societal requirements while maintaining and nurturing the ecological needs of today and the future.

Headquartered in Palatine, Ill., Schneider Electric North American Operating Division (NAOD) employs 19,000 people in 33 plant & logistic sites and numerous sales and services locations throughout the region. NAOD’s total sales in North America in 2008 were $3.6 billion (U.S.). Their products and solutions include the following major brands: Square D® and Juno® Lighting Group. Other Schneider Electric major brands in North American outside the NAOD include: APC®, Pelco® TAC® and Xantrex®.

Schneider Electric NAOD benchmarks against our key competitors annually on safety performance in North America, and we currently lead the electrical industry in overall performance for MIR. This is significant and speaks to the strong safety culture and commitment to safety that has been established. Additionally, the strong safety results that have been achieved provide a competitive advantage and help to differentiate NAOD in the marketplace.
2. Leadership

Effective leadership is critical in any organization. At NAOD, effective leadership starts with leading by example, taking active involvement in the safety of our employees, creating safety as a value for the company’s customers, influencing the community, and demonstrating support for the environmental, health and safety function of our work.

Leadership demonstrates support for the environmental, health and safety functions. At NAOD this support is demonstrated with a strong organizational structure (Attachments 2A, B & C) and adequate resources at each manufacturing facility. Annually, all environmental, health and safety managers and engineers attend a two-day conference to discuss safety and environmental issues unique to NAOD. In 2008 we had over 60 attendees. We also encourage our safety and environmental managers and engineers to attend the annual National Safety Council Congress or the annual ASSE Congress. For example, in 2007 we had 50 attendees at the NSC Congress in Chicago when we held our annual meeting the same week as the NSC Congress. We also bring our union leadership, EHS team and Human Resources from our union plants together annually for a safety, health and environmental conference for a day & half. In 2009, we had about 45 attendees.

It is important that “safety as a value” is instilled both internally and externally. Chris Curtis, president and CEO of NAOD, believes in safety as a core value for the organization because people are its most valuable asset. He has been quoted as saying, “We want our employees to be able to return home to their families at the end of each day without an injury. We also recognize that the other goals of our company — such as service, productivity and quality — depend on a safe workforce.” These values permeate all levels of the organization. Every manager and supervisor in the organization has safety goals as part of their annual review.

In 2006, our previous CEO Dave Petratis was highlighted in the National Safety Council’s Safety + Health magazine for CEOs “Who Get It.” The following questions were asked as part of the National Safety Council process and the responses are still true today:
How do you instill a sense of safety in your core employees on an ongoing basis?

“The messages I give in our all-employee and management broadcasts in North America always include my passion for safety, our safety results against our targets, and my challenge to everyone to create a safer workplace. My expectation of every plant manager, general manager and supervisor is to put safety at the beginning of every employee communication and to spend time every day making our organization a safe place to work. Our managers are challenged to model our safety practices and make sure that all of their people complete the required safety training. Managers are held to the same standard and must complete the safety training. Even my staff and I have safety training requirements that we must complete each year.”

How does safety “pay” at your company?

“Safety pays at our company by having fewer people injured and having fewer serious accidents. People are our #1 asset, and one injury is too many. Of course, reduced accidents also mean reduced workers compensation costs, but we recognize that the indirect costs of an accident – such as lost productivity, replacement worker costs, equipment damage and poor quality – far outweigh these costs.”

How do you measure safety? What are the leading indicators that show you how safe you are and where there is room for improvement?

“We measure our safety performance in North America by tracking cases that require medical treatment beyond first aid. This Key Performance Indicator is called Medical Incident Rate and is very similar to the KPI called OSHA Recordable Rate used in the USA. In addition, we track Lost-Time Accidents, Lost-Time Days, and our safety training hours per employee. We use the Bureau of Labor Statistics for our industry and benchmark against our competitors to determine how safe we are. In our view, there is always room for improvement, because our goal is not only to be the safest in our industry, but to be the safest organization in the world.”
How important is off-the-job safety to your company’s overall safety program? What types of off-the-job safety programs does your organization offer to your employees?

“Off-the-job safety is extremely important to our company. In 2005, we introduced to our employees the concept of being safe both on and off the job. You can’t be safe on the job and then go home and be unsafe. The training programs we use are designed to make people think about how they approach a task and the steps they can take to do the task safely whether they are at home or at work. We are striving for a safety culture that people will practice in all aspects of their lives.”

What is the biggest obstacle to safety in your workplace, and how do you work to overcome it?

“The biggest obstacle to safety in our workplace is complacency in our workforce — thinking that we have solved the problem of safe habits; or thinking that “I have done this job so many times that I won’t get hurt”; or “It won’t happen to me.” We work to overcome it by making sure that safety is stressed as the core value in our company in all our communications and all our actions.”

Effective leadership takes active involvement in the safety of the company’s employees. All of our CEO & COO Satellite Broadcasts, as well as our CEO holiday message, include safety and health content. Another example of this involvement is the institution of monthly conference calls with the vice president of each division. These monthly calls include the corporate EHS manager, the plant manager, the plant EHS manager and the supervisor (as needed). These calls review all accidents that have occurred during the month and review corrective actions in order to facilitate an exchange of ideas and to implement corrective action at all facilities.

Another key involvement is the inclusion of safety, health and environmental reporting in the executive operational staff meetings. Safety is always on the agenda.

Effective leadership creates safety as a value for NAOD customers. This is done by offering electrical safety training to NAOD customers and by providing a free DVD entitled, “It’s a Matter of Your Safety.” To date, the company has distributed over 10,000 DVDs to customers, suppliers, governments, industries, military, teachers, etc. In addition, safety audits are provided for customers and suppliers to assist in their continued efforts toward a safe workplace.
George Powers Sr. VP of Human Resources, is leads our healthy lifestyles initiative and our community support and giving programs. Our healthy lifestyles initiative require each manufacturing, logistics and larger office locations was required to have a healthy lifestyles program in place by May 2008. Each location was given funding of $25/employee for wellness activities and was required to ensure their efforts covered all eight of the key areas—general wellness, physical activity, nutrition, weight management, tobacco cessation, stress management, recreation, and encouragement to participate in our annual health assessment program.

Rich Widdowson, vice president, Safety Health & Environment, has played a leading role in our key environmental objectives of reducing our waste and to reduce energy consumption. Each location established waste reduction targets in the ISO 14000 system and we have improved our waste recovery rate by nearly 16% from 2005 to 2008. Our goal was to reduce energy consumption by 10 percent per employee by the end of 2008 based on 2004 use. NAOD achieved energy reduction 22 percent by end of 2008 based on 2004 use and avoided an estimated 46,000 tons of carbon dioxide emissions. This was accomplished by improvements in HVAC, motor control, lighting upgrades, energy conservation, energy management system to name a few.

Effective leadership also influences the community. NAOD’s facilities are encouraged to take a leadership role in community involvement. This is demonstrated in the many NAOD safety awards that have been received. Recently, awards were presented to the Lincoln, Neb; Columbia, S.C.; Seneca, S.C.; Schiller Park, Ill. and Edmonton, Alberta Canada plants. The Lincoln facility was approved by OSHA to participate in the Merit Voluntary Protection Program (VPP) (Attachment 4) and received the Spirit Award from the Nebraska Safety Council for their safety improvement. Similarly, the Schiller Park, Ill., facility received the Outstanding Safety Performance Award from the Illinois Safety Council. The Columbia, S.C. facility has received the Safety Award for Efforts in Achievements in Accident Prevention from the South Carolina Occupational Safety Council and Commendation of Excellence from the South Carolina Chamber of Commerce. In Canada, the Edmonton facility received a Certification of Recognition (COR) from the Alberta Government with a score of 99 percent. A Certificate of Recognition
is given from the province of Alberta to employers that develop health and safety programs that meet established standards. This certification is not only a prestigious award, but is also used to set NAOD apart from the competition when bidding on contract projects. Our Mexico locations in Tijuana, Monterrey and Tlaxcala have received many safety and environmental awards from the local government.

Additional community involvement can be seen in the leadership role that NAOD embraces with external organizations including the Electrical Safety Foundation International (ESFI), National Safety Council (NSC), American Society of Safety Engineers (ASSE), Home Safety Council (HSC), Manufacturers Alliance for Productivity (MAPI), and the Chicago Climate Exchange (CCE).

Our previous CEO, David Petratis, served on the board of the ESFI and our new COO, Amy Huntington, is anticipating a nomination to the board in 2009. NAOD contributes financially to the ESFI organization and, as a benefactor, has donated $25,000 annually (Attachment 5). NAOD is also listed as a Platinum Beacon Sponsor with donations of $500,000 (Attachment 6). Rich Widdowson serves as the chair for the ESFI worksite safety committee. In 2008, we contributed $500,000 to become a Platinum Level sponsor of the Arc Flash Collaborative Research Project by the National Fire Protection Association (NFPA) and the Institute of Electrical and Electronic Engineers (IEEE). Additionally, NAOD donated $80,000 over the last few years to the HSC and gave $20,000 in 2009 to maintain its status as a Cornerstone Sponsor (Attachment 7). In 2009, Rich Widdowson was elected to the board of directors for the HSC. As a North America business, Schneider Electric was recognized for its efforts on safety off the job and received in 2008 the Home Safety Excellence Award from HSC (Attachment 8).

Many manufacturing facilities influence the community by supporting local organizations. For example, the Lincoln facility is a silver sponsor of the Nebraska Safety Conference put on by the Nebraska Safety Council. The Lincoln facility also sponsored the Electrical Safe Work Practices Training for the ASSE greater Omaha chapter and is an active member of the Nebraska Industrial Council on the Environment (NICE), along with being a participant in the Habitat for Humanity program.
3. Integrated Environment, Health and Safety Management System

Schneider Electric, in all host countries, implemented integrated environmental management systems in conformance with the ISO 14001-2004 Standard to foster respect for the earth’s natural resources and continuously improve our environmental performance. Although NAOD has had a comprehensive safety program for many years, in 2008 it deployed the implementation of an integrated safety management system, in conformance with the OHSAS 18001-2007 Standard.

Taking into account ergonomics rules, when designing workstations, improves Schneider Electric’s working conditions and the overall operating results. Covering over 28 categories of workspace design and ergonomics, an expansive Physical Ergonomics Directive is available to process and industrial engineering designers for reference after completion of ergonomics training. Selected areas covered include choice of working posture, choice of cycle time, carrying load and thermal environment. The directive details to engineering designers the Schneider Electric standard of going above and beyond industry standards. Examples of this include the industry requirement for a noise abatement level of 85 decibels compared to Schneider Electric’s working limit of 80 decibels; Schneider Electric’s Manual Material Handling program that sets a target of 26 pounds as the limit to be lifted and carried by any employee; the complete elimination of full revolution press operations, the implementation of a complete 360 degree guarding process on all part revolution and hydraulic presses and the implementation of Fall Prevention measures at 4’ versus the 6’ limitation required by regulation.

Furthermore, Safety and Environmental elements are an integral part of Schneider Electric’s total production system, the Schneider Production System (SPS). The primary objective of the SPS is to standardize the manufacturing process at all Schneider Electric operations, including fundamental safety and environmental processes and procedures. Other key elements of the SPS include manufacturing
principles such as Lean Manufacturing, Short Interval Management, Six Sigma, Process Architecture, Process Engineering and Logistics. It is NAOD’s intention to integrate all management systems, quality (ISO-9000 Series), environment (ISO 14001-2004) and safety (OHSAS 18001-2007), into a single system. Several locations have initiated this 3-in-1 system integration. The benefit of such a system is that all three disciplines are treated as a single management process in terms of continuous improvement and corrective and preventive action. Key elements of this system include:

1. Policy
   • There is a Safety and Environmental Policy for North America that is reviewed annually and is signed by the CEO (Attachment 9).
   • The Policy includes government requirements for all three countries in North America
   • A copy of the Physical Ergonomics Directives for workstation design and a sample of the ergonomics evaluation form are available in (Attachments 10 A, B).
   • Several safeguarding polices, covering topics such as methods and risk assessment, are in place for fixed powered machines and equipment, and power transmission devices and equipment. These requirements apply both to point of operation safeguarding of machines, and to any other danger points where an employee may come into contact with the moving parts of the machine, material or material handling equipment. (Attachments 11 A, B, C, D)

2. Procedures
   • There are Policies and Procedures established and documented for each environmental aspect (ISO 14001) and/or hazard (OHSAS 18000) for North America
   • The procedures can be accessed by any location in the company via the Safety & Environmental lotus notes war room. An example of the Electrical Safety Procedure is included under Attachment 12.
   • Procedures are tailored for each location’s activity and exposures

3. Training
   • There is an annual goal of 12 hours/employee of safety training for all manufacturing employees. This includes compliance, safety knowledge and awareness training.
   • Each location prepares a schedule of monthly training. This schedule includes location, government-required, company-specific, general knowledge and awareness training.
   • Company-specific training for 2008 includes an “Off the Job” emphasis. The training incorporates elements of SafeStart (rushing, frustration, fatigue and complacency) and encourages safe practices in all activities (copy of SafeStart Modules Memo is included in Attachment 13). This year’s theme will be on defensive driving.
   • As part of this roll-out, a communication plan was developed and posters were printed and distributed (Attachments 14 A, B)
   • Previous company-specific training included videos/DVDs: “Remember Charlie,” “Thank You,” “It’s a Matter of Your Safety,” and “SafeStart”
   • For office employees, two to three hours of on-line safety and environmental courses were required for 2008. (Attachment 15)
To establish the requirements for working safely at heights, ensuring walking/working surfaces are designed, inspected and maintained safely, and protect employees from the hazards of falling objects, employees must undergo Fall Protection and Walking/Working Surfaces training and become certified via the completion of an expansive, 27-page test. (Attachment 16)

In 2006 an ergonomics course was developed for Design Engineers. The course is taught by a Ph.D. professor from the University of Nebraska, and we trained more than 100 product and design engineers. In 2008 we will be training an additional 40 engineers and managers.

To ensure that NAOD’s safety and environment (S&E) managers/engineers obtain annual training, there are annual internal meetings. The meeting is typically held in conjunction with the ASSE or National Safety Council conference. In 2007, 50 NAOD S&E managers and engineers met in Chicago for one week. The first part of the week was spent at the National Safety Council Congress, (Complete NSC Congress machine safety presentation available for Reference in Attachment 17, we also have presented Electrical Safety, NFPA 70E, at the Congress since 2005 and this presentation was accepted again for the 2009 NSC Congress) and 1.5 days were spent in Schaumburg, with an additional 15 managers, discussing best practices and sharing ideas.

4. Employee Involvement
   • Safety Committees
     • All locations have safety committees with membership from all levels of the organization that work to proactively address safety and environmental concerns
     • Safety Committees are involved with accident investigations, the suggestion program, inspections, waste minimization, etc. Safety committees receive additional training to increase their competency and confidence
     • 5S
       • 5S focuses on an organized work environment (sort, straighten, sweep, standardize, sustain)
       • Teams are formed to implement 5S throughout the facility and are typically trained on safety and 5S
       • Areas are scored on a periodic basis to encourage competition and a clean facility

5. Audit
   • There are four major audit processes: Team Assessment, Scorecard, Critical Focus Checklist, and Safety Diagnostic
     • The TEAM Assessment Process is a comprehensive three-day audit that evaluates safety, ISO 14001, Security, Health, Wellness and Environmental issues. A TEAM Assessment is conducted every three years with two to three safety professionals. A score of 1 to 100 is given to a facility. Improvement goals are established based on the score and deficiencies identified. (Assessment Document, Scoresheet, Interview Questions, Audit Notes Form, Assessment Audit Tool are available in Attachments 18 A, B, C, D, E.)
     • The Critical Focus Checklist (Attachment 19) is used to identify standard procedures that must be implemented and current at all times, and this is completed annually.
     • Schneider Production System Assessment
6. Communication and Recognition
   • Communication
     • All communications from the CEO to employees include a safety message
     • The vice president of safety, real estate, security and environment communicates results
       and successes to the senior executive staff on a monthly basis
     • There is a company-wide bulletin, Safety & Environmental Updates, published on a
       monthly basis (Attachment 1). The S&E Updates provides monthly and year-to-date
       safety performance, celebrations/recognition information
     • Plant-wide communications from the plant manager include a safety message
     • Communication boards have been implemented at most facilities. These boards allow
       employees to communicate productivity, quality and safety issues in one place. There
       is a team that checks the boards every day to implement corrective action
   • Recognition
     • Recognition Plans are established annually. Facilities outline how they will recognize
       all major accomplishments - individuals, departments, groups, teams and plant
       • Safety suggestions and/or 5S processes for an area or plant are recognized
       • Injury free milestones are celebrated at each location
         • 30, 60, 90, 120 days without a medical incident
       • 1 Million+ hours without a lost time accident
     • Employees are recognized for outstanding safety suggestions/improvements via gift
       card, parking space near the plant, etc.

7. Management Commitment
   • Managers are measured using Key Performance Indicators (KPIs), and these are included as part
     of their annual performance plan
     • Our annual Employee Performance Award has a safety component. If we meet or exceed our
       MIR target in 2009, all employees in the USA would receive $120. For the last three years this
       award has been offered, all employees have received the maximum award for 2006 & 2007.
       In 2008 we missed the target threshold of 0.80 by ending the year at 0.86 and there was no
       payout.
     • Managers, supervisors and manufacturing engineers are required to treat all near misses and
       injuries as system failures
     • Vice presidents review all injuries individually on a monthly basis and ensure that corrective
       action is implemented at other facilities with similar exposures
     • Our CEO requires immediate notification of all serious accidents (overnight stay in hospital)
4. Performance Measurements and Information Management

Schneider Electric NAOD uses several measurement tools to monitor and track safety, health and environmental performance on a regional (North America) and global basis.

Regional measures include Schneider Electric NAOD’s Medical Incident Rate (MIR), Lost-time Accident Rate (LTAR), Lost-time Day Rate (LTDR), average training hours per employee, environmental permit excursions and number of first-aid cases. The MIR is a rate similar to the Total Case Incident Rate (TCIR) used by OSHA.

To calculate the MIR, Schneider Electric NAOD uses the formula \( \frac{R}{EH} \times 200,000 \) where,

- \( R \) = sum of the number of reportable injuries and illnesses per calendar year.
- \( EH \) = total number of hours worked by all employees per calendar year.
- 200,000 = equivalent of 100 full-time workers working 40-hour weeks 50 weeks per year.

SENA has used this measurement tool consistently for more than fifteen years. The information is gathered by each facility completing the Accident/Incident/Indicators Report form on a monthly basis (Attachment 20). This form is submitted to the company’s Corporate Safety, Health and Environmental department to collate the results. The results are then communicated throughout the company, including other Schneider Electric entities not incorporated into NAOD, by the distribution and posting of our monthly newsletter, Safety & Environmental Updates.

Lost-time injury rates (LTAR), lost-time days rates (LTDR), average training hours per employee, environmental permit excursions, and number of first-aid cases are reported and communicated
by the same methods. The LTA and LTDA are based on reportable injuries per 100 workers as is the MIR. Training hours are calculated by adding total hours of effective safety and environmental related training and dividing by number of employees. Permit excursions are based on both Notice of Violations (NOV) from regulatory agencies and through internal analysis. Employees are strongly encouraged to report all first-aid cases for analysis, and those numbers are tracked as well.

Global measures include Schneider Electric’s Frequency Rate (FR), Severity Rate (SR) and Environmental Indicators. The FR tracks the frequency of lost-time injuries per employee. To calculate the FR, Schneider Electric uses the formula

\[
FR = \frac{LT \text{ Injuries}}{EH} \times 1,000,000
\]

where,

- \(LT \text{ Injuries}\) = number of injuries with one or more associated lost-time calendar days
- \(EH\) = total number of hours worked by all employees per calendar year
- 1,000,000 = hours used to standardize into a rate

The SR tracks the severity of lost-time injuries as measured by number of lost-time days associated with an injury. To calculate FR, Schneider Electric uses the formula

\[
SR = \frac{\text{Number of LT Calendar Days}}{EH} \times 1,000
\]

where,

- \(\text{Number of LT Calendar Days}\) = number of calendar days lost due to an occupational injury
- \(EH\) = total number of hours worked by all employees per calendar year
- 1,000 = hours used to standardize into a rate

In addition to the Safety Metrics, Schneider Electric, for its annual sustainability report, collects environmental metrics such as energy consumption, water consumption, waste recovery rates and VOC consumption.

A Safety & Environmental Scorecard is one other performance measure NAOD uses to monitor both performance and continuous improvement. The S&E Scorecard (Attachments 21 A, B) is used by the manufacturing locations to monitor performance in six categories including Management Commitment, Employee Training and Awareness, Employee Involvement, Communication and Recognition, ISO 14001/OHSAS 18001 implementation and MIR/LTA/Excursions. The facility is scored
each year. The information is used to match up our best-in-class facilities with facilities that need improvement in an effort to share best practices.

**Healthy Lifestyles Summary**

Regional measures include Schneider Electric NAOD’s facilities’ involvement in health-focused community organizations and the facilities and employees’ participation in the company’s healthy lifestyles initiatives and opportunities. Each location was given funding of $25/employee for wellness activities and was required to ensure their efforts covered eight key areas — general wellness, physical activity, nutrition, weight management, tobacco cessation, stress management, recreation, and encouragement to participate in our annual health assessment program.

All of the NAOD locations obtained Gold Level recognition from the American Heart Association Start! Program. “Gold-level” recognition is awarded to companies that fulfill criteria such as offering employees physical activity support, increasing healthy eating options at work, promoting a wellness culture, as well as implementing at least six of the physical activities, two of the nutrition activities and one of the culture activities listed in the Start! application form.

All of the locations submitted strategic healthy lifestyle plans that passed the internal audit for design and implementation.

All risk indicators suggest that health awareness through participating in the health assessment minimizes employee health risk factors. Each location has achieved 60 percent participation in the health assessment. Employees based out of plant facilities and at NAOD headquarter locations saw a participation rate of 66 percent.

Based upon an internal survey conducted by NAOD, 49 percent of employees report that healthy lifestyles initiatives have had a positive impact on their overall work experience and 72 percent of employees report that the company’s culture is supportive of healthy lifestyles.
5. EHS Results

Environmental Results

Schneider Electric publishes an annual Sustainable Development Report, for which NAOD provides data, information and ensures conformance with corporate requirements and objectives. One such objective was to reduce energy consumption per employee by 10 percent by the end of 2008 based on 2004 use. NAOD achieved energy reduction 22 percent by end of 2008 based on 2004 use and avoided an estimated 46,000 tons of carbon dioxide emissions.

Schneider Electric has programs in place to ensure compliance product related directives such RoHS, REACH and EuP (IPPC). There is also a “controlled substances” list of chemical substances and compounds which are prohibited, restricted and/or considered for elimination from use to protect our workers and the environment.

Every effort is made to use recycled material in our products where technologically feasible, for packaging, including conformance with applicable European Union directives. Inter-plant shipments and wholesale shipments use returnable packaging. NAOD core operations (USA plants) have improved waste recovery by nearly 16 percent between 2005 and 2008, resulting in 84 percent or 32,300 tons of manufacturing waste being diverted from landfill disposal in 2008.
**Health Results**

All risk indicators suggest that health awareness through participating in the health assessment minimizes employee health risk factors. Each location achieved 60 percent participation in the health assessment. Employees based out of plant facilities and at NAOD headquarter locations saw a participation rate of 66 percent. The participation rate of remote (telecommuter, sales, service, etc.) employees brought the average down. The fundamental difference for remote employees is that many had to travel to receive a health assessment.

Based upon an internal survey conducted by NAOD, 49 percent of employees report that healthy lifestyles initiatives have had a positive impact on their overall work experience and 72 percent of employees report that the company’s culture is supportive of healthy lifestyles. These results are biased due to the timing of the Schneider Electric’s internal survey and the point when the healthy lifestyles initiative was actually launched. (Attachment 22).

**Safety Results**

While NAOD’s injury statistics were consistently better than their industry average, the company determined in 2003 that in order to build a culture of safety throughout NAOD, it needed to initiate a plan and set aggressive goals beyond industry standards. From 2003 to 2007, annual goals initially included a target of 20 percent reduction each year for the Medical Incident Rate (MIR), Lost-Time Accident Rate (LTAR) and Lost-Time Day Rate (LTDR). Our goals for 2008 are 10 percent reduction in MIR, 10 percent in LTAR and 20 percent in LTDR.

Since 2003 there has been a 71 percent improvement in the MIR (which is similar to OSHA’s Total Case Incident Rate); a 65 percent improvement in LTAR; and a 67 percent improvement in LTDR. This translates to an outstanding result of 353 fewer injuries in 2008 compared to 2003. (Attachment 23)

Our continued improvement with regards to the aforementioned safety statistics can also be seen in the following charts, which look at each country within NAOD:
6. Linkage between EHS and Business Performance

There is a strong link between EHS and productivity. The business systems that govern and guide the productivity and quality processes are also used for safety. This is reflected in the integration of safety, health and environmental accountability within NAOD’s business. The function responsible for safety, health and environmental management within our organization is led by the vice president of safety, real estate and environment. This position reports in to our Executive Team on two fronts, Human Resources and Operations. This is important to integrate both people and business needs. EHS personnel at the individual manufacturing locations maintain direct reporting responsibility to their facility managers and are part of the management staff. This helps to focus the local management team on the safety, health and environmental needs of the facility and keeps the EHS personnel involved in the business decisions for the facility. The local EHS personnel also have an indirect reporting responsibility to the corporate safety team in order to maintain program integrity, to work toward common established EHS goals and objectives, and to share best practices.

EHS is also linked to NAOD’s business performance as a direct performance objective for the company. Annual performance awards are based on several objectives, including sales growth, consolidated contribution and MIR. Each objective carries a potential award amount for performance at or above the objective. The last three year’s payouts include: a 2006 reward for each employee of $875 ($200 due to reaching MIR target) each for a total payout of $7.1 million, a 2007 reward for each employee of $1,100 ($150 due to reaching the MIR target) for a total $9.4 million and a 2008 payout of $360 (no payout for MIR due to missing target) each, despite a challenging and turbulent economy. A copy of the 2006, 2007 and 2008 Performance Award letters that were distributed to all employees are included as (Attachments 24 A, B, C). Our 2009 Performance award includes MIR again as a safety target and if we achieve the goal of 10% improvement over 2008 each employee would receive $120 for this objective.

The link between NAOD’s program and business performance is also reflected in workers compensation costs and productivity numbers. Over the last five years our workers compensation...
premiums have decreased by over 40 percent, while medical costs across the nation have greatly risen. This is a direct result of NAOD safety, health and environmental program improvements that have led to reduced injury frequency and severity. We have projected that Schneider Electric NAOD is saving $10 Million in Workers’ Compensation costs in 2009 vs. if we had not improved since 2003. The safety, health and environmental team have saved money on NAOD’s bottom line while improving productivity by keeping employees injury free and on the job. Safety, health and environmental performance is not just linked to business performance, it is an integral part of the business. Environment, health and safety, along with community, are the guiding principles for NAOD’s business strategy.
7. Other Factors

Due to economic conditions in late 2008 and 2009, Schneider Electric made workforce reductions throughout North America of over 2000 employees (hourly & salaried). 2009 has continued to be a challenge as we closed our Schiller Park, IL assembly facility recently announced plans to move two assembly areas out of Seneca, SC, and utilize the capabilities and capacity of two North American factories in Monterrey, Mexico. While these certainly are not easy decisions, they are the right ones for our business. We continually evaluate all of our operations, and workforce moves that improve our cost position and competitiveness in the industry. With all these difficult decisions, it has challenged our management team and employees to stay focused on safety, health and the environment.
8. Conclusions and Path Forward

NAOD utilizes leadership, EHS Management Systems, Performance Measurements and Information Management, EHS Results, and the link between EHS and business performance to help us achieve world class performance. The company’s people are instrumental in the success of the environmental, health and safety program because NAOD’s overall success influences its reputation in the marketplace and therefore influences its customers and the community (attachment 25). By driving beyond compliance and integrating a comprehensive continuous improvement model, NAOD has driven dramatic results (A complete list of 2008 awards categorized by NAOD facility can be found in attachment 26). This continues to occur because it is important to have the lowest injury rate and uphold the highest reputation for company employees, its customers and the communities in which NAOD operates. Our year to date MIR performance as of May 31, 2009 is 0.82 compared to a year-end in 2008 of 0.86.

It is evident that safety, health and environmental performance is not just linked to the company’s business performance, it is part of its business performance. The products and solutions that NAOD offers are designed to promote safety, and reduce energy consumption. The company’s business objectives reflect safety and environment and in its communications, both internal and external, focus on safety, health and the environment. The top priorities for NAOD are and continue to be our employees’ environment, health and safety where we live and work.