



# Health & Wellness in the Workplace:

Lessons and Best Practices from the

*Corporate  
Health  
Achievement  
Award*





# *2003 Award Winners*

# Corporate Health Achievement Award





# *Introduction*

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# Introduction



The CHAA reinforces the importance of measurable results and continuous improvement. It provides a forum in which participating companies can exchange ideas and best practices on creating healthy and productive working environments.

## The Corporate Health Achievement Award

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The American College of Occupational and Environmental Medicine (ACOEM) established the Corporate Health Achievement Award (CHAA) in 1996 to recognize organizations that have demonstrated outstanding achievement in employee health, safety, environment and management. The purpose of the CHAA is:

- to foster awareness of quality occupational and environmental medical programs,
- to identify model programs and outstanding practices with measurable results, and
- to encourage organizational self-assessment and continuous improvement.

Employee health programs operating in companies or government agencies within North America, including manufacturing, service, for-profit or non-profit organizations, with more than 1000 workers, are eligible to apply. Participating organizations submit a comprehensive application about their program and undergo a rigorous review by an expert panel to assess four key categories: Healthy People, Healthy Environment, Healthy Company, and Management & Leadership. Organizations have the opportunity to receive feedback on strengths and areas for improvement and gain recognition for best practices and model programs.

However, the CHAA does more than recognize the accomplishments of a single organization. It tells the North American business community that comprehensive occupational health programs make good business sense. The CHAA reinforces the importance of measurable results and continuous improvement. It provides a forum in which participating companies can exchange ideas and best practices on creating healthy and productive working environments. Finally, it helps foster an atmosphere that can attract and retain the talented people who help our companies achieve even greater successes.

This award highlights a commitment to excellence by its sponsor, ACOEM, and its co-sponsor, GlaxoSmithKline.

ACOEM is the nation's largest organization for occupational and environmental physicians and other health care professionals who promote the health and safety of people in the workplace and environment through preventive services, clinical care, research and education ([www.acoem.org](http://www.acoem.org)).

## Introduction



*"ACOEM is committed to the Corporate Health Achievement Award and in acknowledging those companies demonstrating excellence in health and wellness programs. ACOEM is also committed to disseminating this information to assist other corporations in ensuring healthy worksites."*

*Edward J. Bernacki, MD, MPH, FACOEM  
ACOEM President, 2002-2003*



In 1999, GlaxoSmithKline (GSK) became a co-sponsor of the Corporate Health Achievement Award. GSK is one of the world's leading research-based pharmaceutical and health care companies who is committed to improving the quality of human life by enabling people to do more, feel better, and live longer ([www.gsk.com](http://www.gsk.com)).

*"These companies make an investment in the wellness, fitness and safety of their most important asset – their employees. They do it because they know that healthy people work more productively. And that makes good business sense. We recognize how important this commitment is at GlaxoSmithKline, and we are pleased and proud to co-sponsor this prestigious award. Awards are not only satisfying, they send a strong signal to customers, stakeholders – and employees – that the winner 'walks the talk' and understands the vital link between healthy work environments and healthy employees. It shows others the rewards and recognition that come from improving people's lives by taking a vested interest in their health and well-being."*

*Robert Ingram  
Vice Chairman, Pharmaceuticals  
GlaxoSmithKline*



For more information on CHAA, visit [www.chaa.org](http://www.chaa.org).

## Introduction

## 2003 Award CHAA Winners\*

The American College of Occupational and Environmental Medicine and GlaxoSmithKline are proud to announce the following winners of this year's award:



These organizations are committed to occupational and environmental programs of the highest quality. They are leaders in developing innovative and effective practices to promote the well being of both their employees and communities.

BAE SYSTEMS, Information & Electronic Warfare Systems

Marathon Oil Company/Marathon Ashland Petroleum LLC

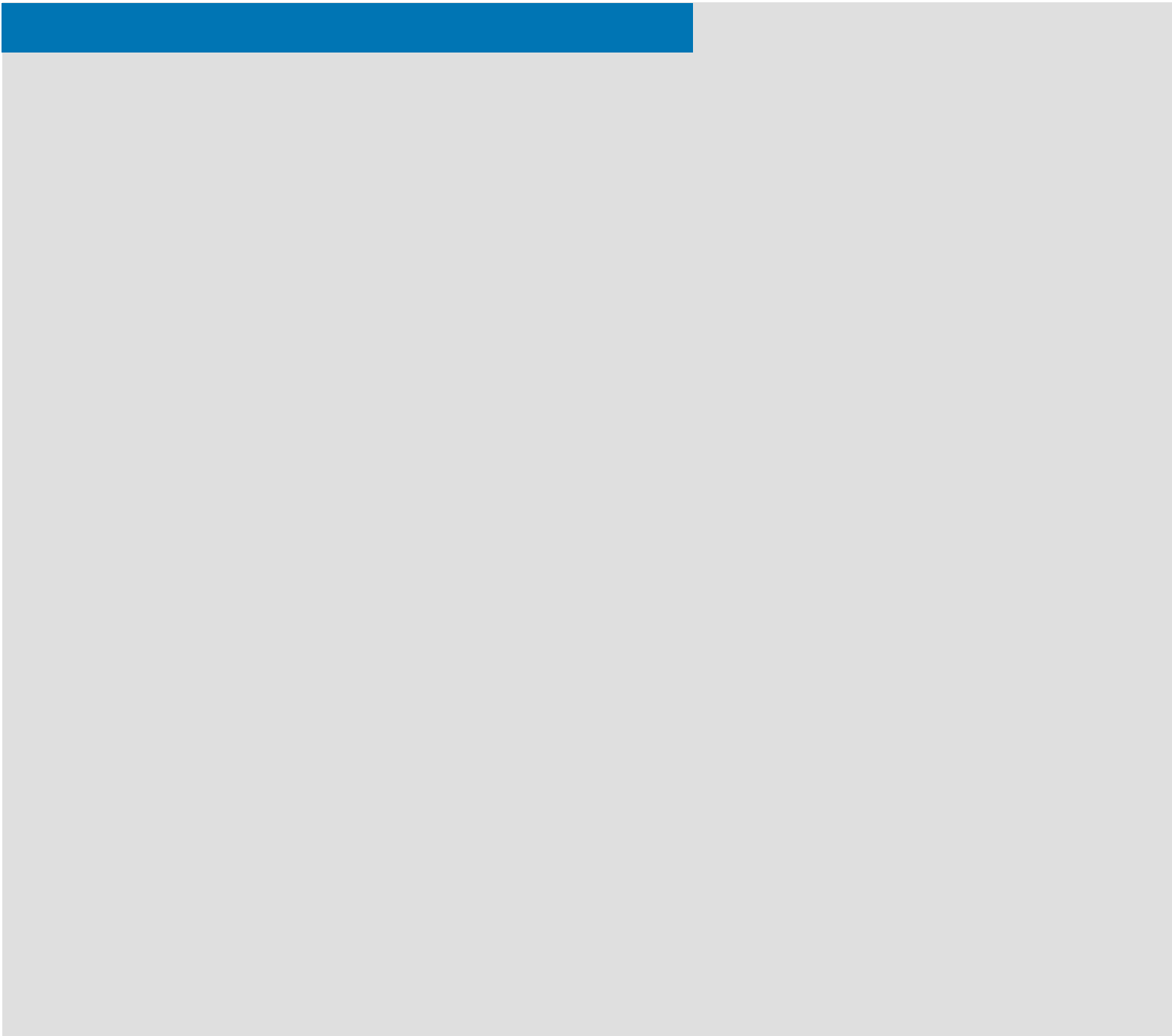
Union Pacific Railroad Company

These organizations are committed to occupational and environmental programs of the highest quality. They are leaders in developing innovative and effective practices to promote the well being of both their employees and communities. Through systematic self-evaluation, they are dedicated to the constant improvement of their activities in this area.

This publication highlights a small number of programs from each winning organization's total health, occupational, and environmental efforts. They illustrate exemplary approaches to workforce and workplace health and safety. For each company, examples are included for the key categories of: Healthy People, Healthy Environment, Healthy Company, and Management & Leadership.

\* Award winners from prior years are included in the appendix.

*BAE SYSTEMS*





### BAE SYSTEMS

BAE SYSTEMS Information & Electronic Warfare Systems (IEWS) employs 5,400 people at 10 major facilities in 8 states. The business unit is a major producer of aircraft self-protection systems and tactical surveillance and intelligence systems for all branches of the armed forces. Other major business areas include microwave, mission and space electronics, infrared imaging, and automated mission planning systems.

BAE SYSTEMS is a systems company, which prides itself on innovating for a safer world. BAE SYSTEMS employs nearly 100,000 people including joint ventures, and has annual sales of around \$18 billion. The company offers a global capability in air, sea, land and space with a world-class prime contracting ability supported by a range of key skills. BAE SYSTEMS designs, manufactures and supports military aircraft, surface ships, submarines, radar, avionics, communications, electronics, guided weapon systems and a range of other defense products. BAE SYSTEMS is dedicated to making the intelligent connections needed to deliver innovative solutions. Its logo states "We Protect Those Who Protect Us."

BAE SYSTEMS North America is a high-technology U.S. company employing more than 22,000 Americans who live and work in some 30 states, the District of Columbia, and the United Kingdom. The company is dedicated to solving its customers' needs with both highly innovative and leading-edge solutions across defense electronics, systems, information technology and services arenas.

BAE SYSTEMS Information & Electronic Warfare Systems (IEWS) employs 5,400 people at 10 major facilities in 8 states. The business unit is a major producer of aircraft self-protection systems and tactical surveillance and intelligence systems for all branches of the armed forces. Other major business areas include microwave, mission and space electronics, infrared imaging, and automated mission planning systems.

### Workforce and Workplace

IEWS has approximately 5,400 employees at major locations in Nashua, Merrimack, and Hudson, N.H.; Lexington, Mass.; Lansdale, Pa.; Pomona, Calif.; Yonkers, N.Y.; Manassas, Va.; Fort Worth, Texas; and the District of Columbia. The majority of IEWS employees work in the New Hampshire and Massachusetts facilities.

The company's workforce is well educated, professional, and stable. Engineering talent is vital to IEWS with half of its engineers having at least a bachelor's degree and the other half holding advanced degrees. About one-half of the workforces are engineers and program management personnel, one-third are manufacturing and operations personnel, and the remainder are support personnel (business management, facilities personnel, and others). IEWS employees average 45.5 years of age and have an average service length of 14.2 years. Attrition is low, with the current average voluntary attrition rate below 1.4%.

Many of the company's facilities consist of offices, laboratories and manufacturing spaces that range from shipping areas to high tech electronics facilities. Since the facilities are a combination of "clean" offices and laboratory and manufacturing areas with numerous environmental, safety and health controls in place, potential health and environmental hazards are relatively low. Workplace hazards include cumulative trauma disorders associated with office workstation use and exposure to noise, radiation, laser, electrical, and respiratory situations in laboratories and manufacturing areas.

## Health Achievement Overview

The following programs are highlights from the comprehensive corporate health and safety program at IEWS. They show some of the company's more innovative and exceptional initiatives in this area. In its goal to be "the employer of choice," IEWS demonstrates strong commitment to the total well being of its workforce.

On a routine basis, the medical department evaluates work sites and work practices to identify and eliminate exposures to cumulative trauma. Supervisors are required to send all employees who exhibit signs and symptoms of possible cumulative trauma disorders to the medical department for evaluation.

## Healthy People

### Ergonomics

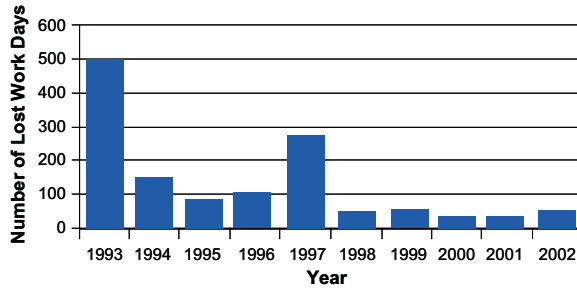
Since the early 1990's, IEWS has been proactive in ergonomics practices. Its ergonomics program is a systematic and thorough process to analyze workstation set-ups in administrative and production work areas. On a routine basis, the medical department evaluates work sites and work practices to identify and eliminate exposures to cumulative trauma. Supervisors are required to send all employees who exhibit signs and symptoms of possible cumulative trauma disorders to the medical department for evaluation.

Employee education and training in ergonomics begins at orientation and continues throughout employment. Starting with the New Employee Medical Evaluation and File setup, the business conducts ergonomic evaluations and recommendations are provided to both the employee and his or her manager. The Medical Department makes a follow-up visit to assess the effectiveness of the recommended ergonomic changes.

This intervention has resulted in a steady decrease of reported cumulative trauma disorder injuries and lost workdays. From 1992 to 2001, workers' compensation costs have declined from 0.69% to 0.18% of payroll, for a cumulative cost saving of \$7.7 million. In recent years, total workers' compensation costs as a percentage of payroll as well as incident rates are significantly below industry averages (Department of Labor, OSHA).

In 1997, however, there was an increase in the number of lost workdays associated with cumulative trauma disorders. A review of the transitional duty program coupled with manager and supervisor training led to identifying additional opportunities for the employee's return to modified duty assignments. If modified duty is not available in an employee's department, the employee is transferred to a transitional duty department where work restrictions can be accommodated for an extended period. This modified program has resulted in fewer lost workdays.

In January 2000, the program was upgraded by establishing Ambulatory Health Clinics across the business' New Hampshire sites. Through this move, the workforce is given ready access to quality medical treatment with minimal time away from the job at low or no cost to the employee.



OSHA Recordable Cumulative Trauma Disorder Days Away From Work  
1993 – 2002

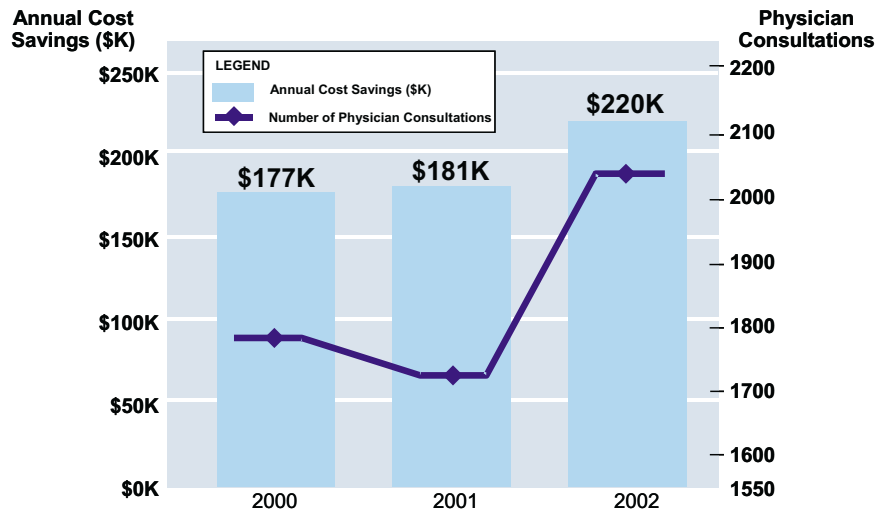
### Ambulatory Health Clinics

In the past, each IEWS facility had a medical dispensary staffed by a full-time nurse where medical supplies were stored and treatment was provided. In January 2000, the program was upgraded by establishing Ambulatory Health Clinics across the business' New Hampshire sites. Through this move, the workforce is given ready access to quality medical treatment with minimal time away from the job at low or no cost to the employee. Employees can make appointments to see the medical director or use the clinic on a walk-in basis. They are treated on site and are often given free prescription(s) and over-the-counter medication. When necessary, they are referred to their primary care provider for further treatment.



Employees using on-site clinics save an average of 3 hours of work time when compared to those who seek outside care. Since 2000, the number of physician consultations has increased, as have the associated cost savings to IEWS. Using average hourly pay rates, cost savings are calculated at \$181,000 in 2001 and \$220,000 in 2002.

The Chemical/Material Review Committee (CMRC) is a key component of this program's risk identification strategy. This committee reviews and approves all chemical product requests and establishes safe-use practices for all chemical products within the business facilities.



Employee Health Clinic Trends, 2000-2002 Use and Cost Savings

## Healthy Environment

### Toxicology Assessments

The company's extensive Industrial Hygiene program is the basis for its evaluation, inspection, and elimination of workplace hazards. The Chemical/Material Review Committee (CMRC) is a key component of this program's risk identification strategy. This committee reviews and approves all chemical product requests and establishes safe-use practices for all chemical products within the business facilities.

- All new use of chemicals or hazardous substances must be approved through the Chemical/Material Review Process prior to purchase, use or evaluation. This applies to new chemicals, chemical transfers to departments that have not received approval to use the chemical, and intra-department transfers to locations that have not received CMRC approval to use the chemical.
- Until the review process is complete, no chemical is permitted into the facility.

As people understand how they function psychologically, they can re-activate their basic strengths to achieve their full potential. Through individually based training seminars and team meetings, senior managers are helped to understand fundamental principles of emotional health.

- When a chemical is requested from a manufacturer who has not evaluated it sufficiently and a suitable substitute cannot be found, IEWS works with the manufacturer to ensure that adequate testing is performed before allowing the chemical into the company.
- Prior to a new chemical's use, IEWS secures information on its safe application and trains employees on how to correctly manage the chemical.
- The Medical Department is the final sign-off on the Chemical/Material Review Form so when it is returned to requesters, they know if the chemical is approved and if so, how to use it safely.
- In 2001, the Chemical/Material Review Committee evaluated 658 chemicals and rejected five.

IEWS has taken the initiative to terminate use of two hazardous materials at the Merrimack, N.H., facility. Operating groups have been asked to eliminate all Class II ozone depleting chemicals (use of Class I ozone depleting chemicals ended in 1994). While mercury use is minimal, it is being eliminated entirely at this facility.

## Healthy Company

### **State of Mind**

In addition to its comprehensive wellness and employee assistance programs, IEWS has expanded its efforts to promote the psychological and emotional health of its employees. The company has embarked on an innovative activity called *State of Mind* to enhance both its leadership's "emotional intelligence" and its organizational climate.

The premise of *State of Mind* is that people possess inherent health such as resilience and common sense. Over time they lose sight of this and encounter both personal and interpersonal problems. As people understand how they function psychologically, they can re-activate their basic strengths to achieve their full potential. Through individually based training seminars and team meetings, senior managers are helped to understand fundamental principles of emotional health.

IEWS credits *State of Mind* with contributing to the company's business success over the last several years, in spite of both the economic downturn and its acquisition in 2001 by a new corporation, BAE SYSTEMS. The current voluntary termination rate for professional staff is below 2% annually, where previously it had been in double figures.

While IEWS recognizes that economic downturn contributes to this decrease, it does not believe that it explains the entire decline. Senior management attributes much of the company's achievement to the leadership capability and high morale arising from *State of Mind*.

*"In today's competitive marketplace, a company's most important discriminator is its people and their ability to solve complex problems with creative and effective solutions. I have found that with a healthy state of mind, we can consistently tap into the vast creativity and wisdom that is available to all of us. While the traditional business approach is to manage the bottom line, I have found that if you nurture a healthy state of mind in your employees, business success and profitability take care of themselves."*



**Don Donovan, VP & GM**  
*IEWS Electronic Warfare/Electronic Protection Business Area*

Corporate values define employees as the greatest company strength and promise that "all our people will be encouraged to reach their full potential."

## Management and Leadership

Management at IEWS makes a strong point of defining employee health as encompassing physical, psychological and emotional components. Corporate values define employees as the greatest company strength and promise that "all our people will be encouraged to reach their full potential." Leadership is committed to the idea that healthy employees (physically, psychologically, and emotionally) are significantly more creative and productive.

To support this commitment, IEWS is in partnership with the Sydney Banks Institute for Innate Health at the West Virginia School of Medicine to study whether long-term shifts in state of mind result in improved quality of work and life. More than 100 employees at a time attend 2-day "Stress Cure" seminars to explore principles of psychological functioning. The belief is that when they understand how the mind works, they can manage their thoughts more effectively so that negative thinking does not control their lives.

Through its partnership, the company is conducting research on the effectiveness of this approach. Questionnaires collect information on factors individuals consider to be limitations to success and clarity, their understanding of their own states of mind, and their understanding of their own resiliency. In addition, employees rate themselves on a self-evaluation scale on the roles that worry, resentment, guilt, fear, and grief play in their lives. Preliminary results from the first group of seminar participants show significant positive improvement. A 6-month follow-up is in process with preliminary findings suggesting that people continue to improve after the seminar, even without further intervention.

Future research will add a salivary cortisol testing protocol to the evaluation process. The company will also track information such as workplace anger, violence, complaints, absenteeism and turnover.

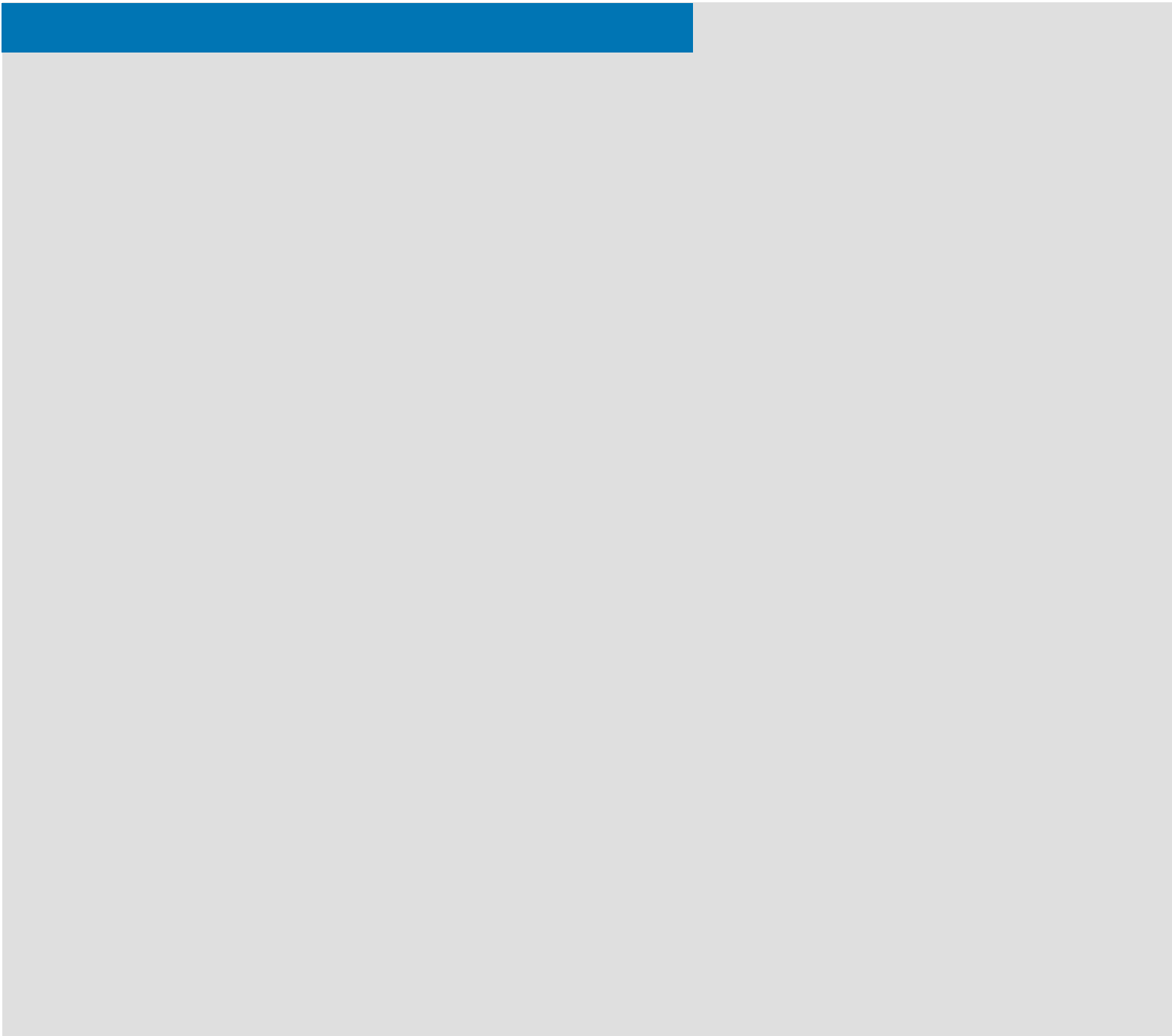
**BAE SYSTEMS**

## Conclusion

BAE SYSTEMS has a strong senior management and eloquent corporate commitment to health, safety, wellness and productivity, as reflected in policies, staffing, programs, and insurance coverage of employee health-related benefits. The management team acknowledges that one of its greatest strengths is the productivity of its highly educated and stable work force. BAE SYSTEMS also recognizes its role as a member of the community in which it operates and actively works to promote a cleaner and healthier environment, not only for its employees, but also for all of the area's citizens.

The management team acknowledges that one of its greatest strengths is the productivity of its highly educated and stable work force.

*MARATHON OIL COMPANY  
MARATHON ASHLAND  
PETROLEUM LLC*





# MARATHON OIL COMPANY MARATHON ASHLAND PETROLEUM LLC



MAP is also one of the largest terminal operators in the U.S. with operations including both light product terminals and asphalt/heavy oil terminals.

## The Company

Houston-based Marathon Oil Company (MOC) is an integrated energy business and a top-five U.S. oil company specializing in exploration and development activities in 10 countries. Principal exploration activities are in the United States, the United Kingdom, Angola, Canada, Equatorial Guinea and Norway. Principal development activities are in the United States, the United Kingdom, Canada, Equatorial Guinea, Gabon, Ireland, the Netherlands and Norway. MOC produces 412,000 barrels of oil equivalent per day.

Marathon Ashland Petroleum LLC (MAP) was formed January 1, 1998, from the downstream operations of its long established parent companies, Marathon Oil Company, a 62% interest owner, and Ashland Inc., a 38 percent interest owner. MAP is a highly efficient, cost-effective and competitive refining, marketing and transportation company, commanding approximately \$8 billion in assets.

Although MOC and MAP have separate operational management structures, they share health services and benefits.

## Workforce and Workplace

With a combined workforce of 9,500, MOC has 3,000 employees worldwide and MAP has 6,500 employees. MOC's international operations, characterized by exploration, drilling and production of liquid and gas hydrocarbon wells both on land and offshore, require extensive employee international travel.

MAP's operations in refining, transportation, marketing, pipeline, and chemical manufacturing span 21 states. Its seven refineries have a capacity of 935,000 barrels of crude oil per day. MAP operates an extensive pipeline system that transports crude oil and refined products to and from production fields, offshore platforms, river barges, refineries, product terminals and other pipeline companies. MAP is also one of the largest terminal operators in the U.S. with operations including both light product terminals and asphalt/heavy oil terminals. A fleet of transport trucks and one of the largest private tank barge fleets in the country complete the distribution system.

## Health Achievement Overview



The programs highlighted below represent only a small part of Marathon's extensive efforts in employee health and safety. They were chosen to illustrate some of the more innovative and comprehensive activities that Marathon Ashland Petroleum LLC and its parent company, Marathon Oil Company (collectively referred to as Marathon) have adopted to promote well being in and beyond the workplace. These programs also demonstrate Marathon's leadership and excellence in this area.

## Healthy People

### Pre-assignment and Periodic Health Evaluations

Maximizing employee health on the job starts with a specific knowledge about the potential hazards an employee may encounter in the workplace,

Maximizing employee health on the job starts with a specific knowledge about the potential hazards an employee may encounter in the workplace, a thorough understanding of the requirements of each employee's job tasks, and correlation of employee physical limitations with these specific job demands to ensure an appropriate "fit." A continuous improvement process has helped Marathon become more sensitive in the determination of fitness for duty in both pre-placement and other periodic health evaluations by focusing on a few key components.

1. Advanced job analyses are performed using a formal process to identify specific and quantifiable physical demands of employee jobs.
2. A corporate database has been established to reference providers. Marathon will soon be able to further profile healthcare providers that seek reimbursement from its health benefits plans, which will allow it to identify physician outliers in relation to practice utilization, charges per CPT and ICD-9 codes, and compliance with standard practice guidelines.
3. To reduce variability in the examination process, a single provider (mobile van) is utilized for most of the medical surveillance examinations performed domestically. Since the same provider is at all of the locations, all fitness for duty decisions are made utilizing the same method by the examiner, thus enhancing our position within the framework of the ADA. Examinations through this process have resulted in real cost savings and because these exams are done onsite, lost work time is minimized.



## Diagnosis and Treatment of Occupational Injuries and Illnesses

Nearly 75% of Marathon employees can receive rapid triage and referral by an occupational nurse or physician for managing work-related injuries and illnesses. For employees in areas without an onsite nurse, the company has established an internal reporting structure known as MAPLINE. In the event of an occupational injury or illness, supervisors, employees or safety support personnel report the incident by calling the toll free number for MAPLINE. Corporate occupational health nurses are notified immediately and early intervention can begin.

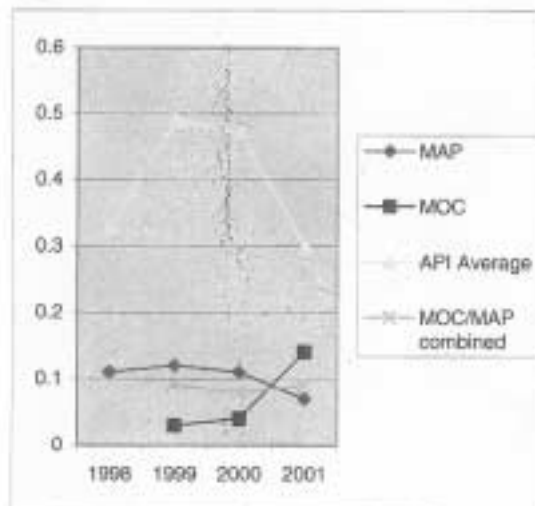
During an employee's recovery, Marathon's Health Services communicates with the treating provider about treatment plans and fitness for duty and is the liaison with the field, allowing for an early return to work. Upon their return, managers provide employees with transitional work to keep them as valuable team members and to manage their disabilities effectively.

During an employee's recovery, Marathon's Health Services communicates with the treating provider about treatment plans and fitness for duty and is the liaison with the field, allowing for an early return to work.

## Safety Performance

Both companies have exceptional safety records and therefore, significant occupational injuries are rare. However, when they do occur, Health Services is called upon to manage cases to reduce the impact on the injured employee and the job. Health Services plays a critical role in minimizing the number of OSHA recordable cases and lost time accident cases. The lost time injury rate is in the top tier within their industry, and significantly below other industries. The recordable incidence rate is slightly below industry averages.

Figure 3 OSHA Lost Time Incidence Rate



## Healthy Environment



Marathon has established a new ergonomics program with the goal to eliminate ergonomic related injuries.

### Occupational and Environmental Hygiene

The primary mission of the occupational and environmental hygiene program is to protect employees and the public from workplace chemical, microbiological and physical health hazards. The company uses well-established practices of “anticipation, recognition, evaluation and control” of situations where employee exposure to potential hazards exists.

Marathon continually strives to improve its programs by adopting proactive processes for anticipating and recognizing problems, measuring leading indicators rather than lagging statistics, and establishing corporate guidelines and example plans that all business units can modify and implement. Marathon has based its programs on the correlation of disease and exposure. As disease is correlated to exposure, exposure necessarily drives medical surveillance activities.

As an example of proactive efforts in preventing injury or illness, Marathon has established a new ergonomics program with the goal to eliminate ergonomic related injuries. Marathon has added a number of tools for risk analysis, such as a web-based questionnaire for office workers, and a Baseline Risk Identification of Ergonomic Factors Survey (or BRIEF survey) for job screening. A detailed job analysis is then completed when screening results suggest ergonomic risk factors exist. The company also uses the traditional tools such as the NIOSH Lifting Manual, the Snook Push-Pull, and the Strain Index. Going forward, an example of a proactive measurement will be the number of ergonomic risk factors mitigated.

### Disaster Preparedness

Marathon defines emergency preparedness as a vital function, necessary to protect employees, communities and the environment. The company is highly committed to its extensive efforts in this area. To meet this commitment, Marathon has established a Corporate Emergency Response Team (CERT) to handle both domestic and international events.

Annual training drills are conducted at both domestic and international locations using scenarios that are most likely to occur and pose the highest risk for environmental damage. Drills are two or three day events involving corporate participants and representatives from the U.S. Coast Guard, state and federal Environmental Protection Agency, police and fire departments, emergency medical services, Civil Air Defense, the Occupational Safety and Health Administration, the FBI, mayors and State Department officials. Drills are critiqued for effectiveness and the action plan is revised as necessary.



Benchmarking studies recognize the Incident Command Structure of Marathon's CERT as the leading program among oil industry peers. Introduced to this program in 1999, a Russian Environmental Protection Ministry was impressed enough to adopt this structure as law.

In addition to CERT participation, Health Services conducts hydrofluoric acid (HF) exposure drills for the 6 refineries that utilize HF acid in catalytic processes. Several months prior to holding a HF exercise, educational seminars and grand rounds are sponsored at nearby hospitals and with the first responders so that expectations of medical treatment are established ahead of time. During the drill, Health Services rates performance of first responders, local EMS, ambulance crews, hospital staff and physicians on their knowledge of HF treatment protocols.

## Healthy Company

### **Well ALL Ways**

Marathon became one of the pioneering companies to offer free colonoscopy screening to all employees and spouses age 45 or older, with repeat screens offered every five years.

In 1989, Marathon established a wellness program that provided health information and modest reimbursement of wellness activities. By 2000, the participation rate had dropped to just 20% of eligible employees. Recognizing the need for change, the company completely revised the program in 2001 and renamed it Well ALL Ways. Staywell® Health Management provides administration and program content.

The program's cornerstone is the HealthPath® Health Risk Assessment. Employees and spouses who complete the annual assessment receive \$250 in a wellness bank to be used for reimbursement of health-related services, activities and equipment. In 2002, the program's first year, participation jumped to 84% of all eligible employees and 70% of eligible spouses.

To further reduce risk, Marathon offers employees and spouses free biometric screening at its larger worksites. In addition, health plans now allow every employee and dependent to receive an annual wellness physical at no cost to the employee.

The showpiece of Well ALL Ways is the new colonoscopy screening benefit. In the past, only executive managers could have company paid screening colonoscopies. Over one year, nearly 50% of executives had some colon pathology and several high-cost cases in their health plan data were due to colon cancer. Marathon became one of the pioneering companies to offer free colonoscopy screening to all employees and spouses age 45 or older, with repeat screens offered every five years.



*"I feel very fortunate to work for a company that provides the Well All Ways program and cares about their employees. Every employee should take advantage of the Well All Ways program and colonoscopy program. It could save your life, it saved mine."*



*Connie Thomas  
Senior Administrative Assistant*

## Management and Leadership

Both companies are committed to excellence in the areas of health, environment and safety (HES), and in HES performance, predicated on twelve guiding principles. This commitment is an essential part of the business, and is being achieved through the adoption of management systems based on continual measurement and improvement.

Marathon established a formal epidemiology program to complement its industrial hygiene and toxicology programs. Epidemiology research in 2002 included a comprehensive survey of malaria transmission on Bioko Island in Equatorial Guinea. After acquiring assets in the country, Marathon discovered that malaria is the greatest health threat to the people living and working there, including Marathon employees. With strong management support, the company sent a team of experts to assess the extent of this disease and the requirements for its control. Marathon is committed to eradicating or significantly reducing malaria on this island.

Because no well-defined metrics existed for either its industry or corporate health programs in general, the company tackled this problem by participating in the American Productivity and Quality Center Consortium Benchmarking Study conducted by MEDSTAT. The study used data from participating companies and external norms to identify opportunities for cost savings and quality improvement. While results identified occasions for enhancing corporate financial health, Marathon further commissioned MEDSTAT to conduct a Medical Department Benchmarking Study with 20 other companies to collect key metrics on employee, environmental, and organizational health and leadership based upon ACOEM's Corporate Health Achievement Award criteria. As Marathon builds upon its measurements, it welcomes all opportunities to set consensus standards with other groups and forums and benchmark against these.

*"Our malaria eradication program is a great example of the company's commitment to its employees and to the communities in which we operate. By cooperating with the Equatorial Guinean government on this project, we will be helping to save literally thousands of lives."*

*Susan Rynard, MSPH  
Senior Advanced HES Professional*

Marathon further commissioned MEDSTAT to conduct a Medical Department Benchmarking Study with 20 other companies to collect key metrics on employee, environmental, and organizational health and leadership based upon ACOEM's Corporate Health Achievement Award criteria.

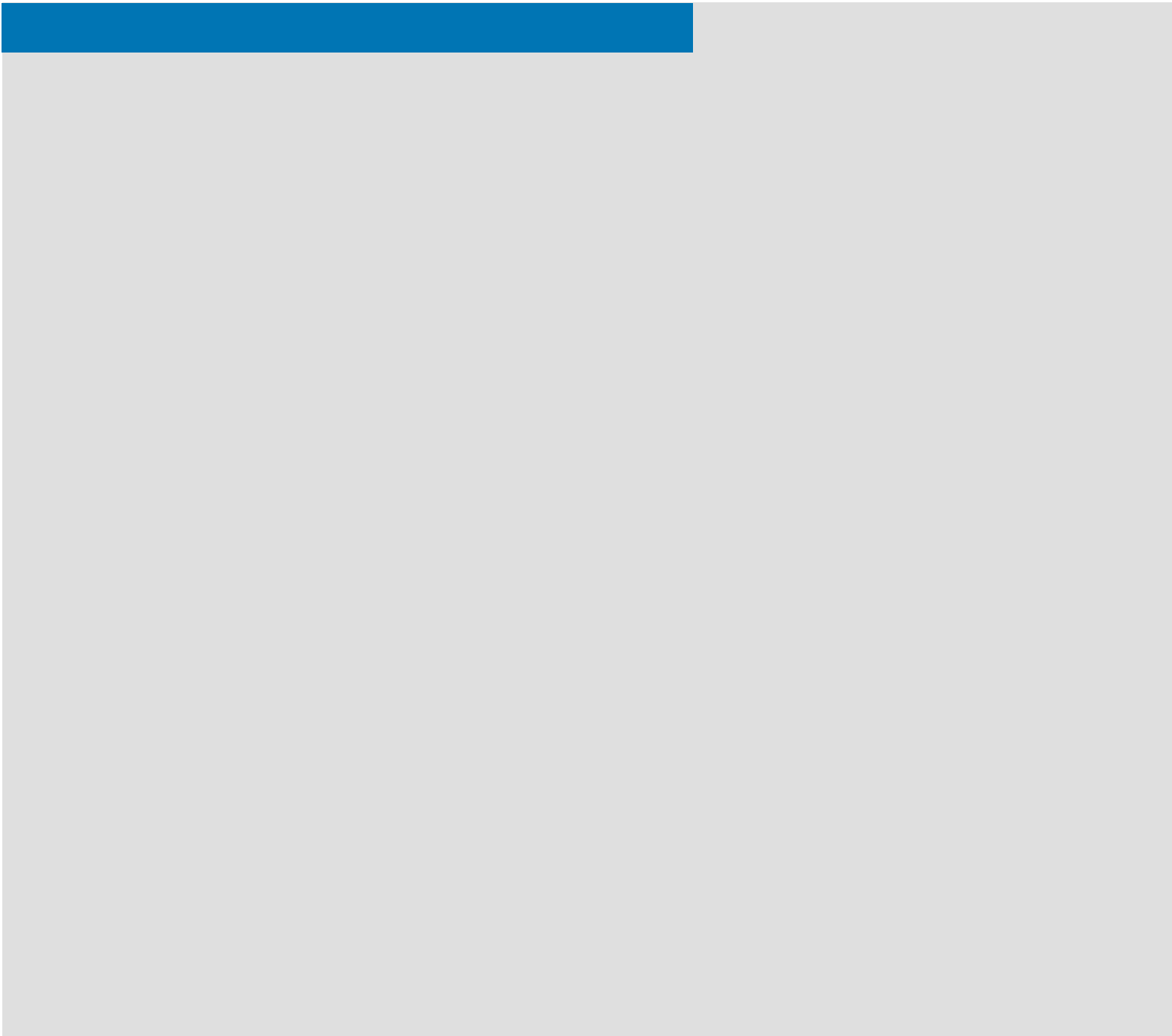
## Conclusion



Marathon Oil Company/Marathon Ashland Petroleum LLC has an employee advocate culture. The healthy corporate culture manifests itself in all aspects of MOC/MAP operations, from employee health (both occupational and non-occupational), to worksite safety, where employees are provided with significant resources and support to maintain productivity in a safe work environment. Senior management supports the activities of Health Services and shows much enthusiasm and support, including both financial resources as well as active participation in programs to promote employee involvement. This endorsement by senior management has led to the implementation of numerous programs and services that will continue to enhance the overall health of this corporation.

Senior management supports the activities of Health Services and shows much enthusiasm and support, including both financial resources as well as active participation in programs to promote employee involvement.

*UNION PACIFIC  
RAILROAD COMPANY*







## The Company

Union Pacific Railroad, headquartered in Omaha, Nebraska, is the largest subsidiary company of Union Pacific Corporation. It is the largest railroad in North America with over 33,000 miles of track in 23 states in the Western two-thirds of the country.

### **Workforce and Workplace**

Union Pacific Railroad has over 47,000 employees. The workforce is 95% male with an average age of 46 years, a population characteristic not found in many organizations. Ninety percent of the workforce belongs to one of 15 different unions. The workforce has a very diverse geographical mix. Employees live and work in cities as varied as Hermiston, Oregon, population 13,000, and Houston, Texas, population over 3 million.

The company divides its major work activities into three categories:

- *Transportation.* Approximately 33,400 employees work in service crafts responsible for safe and on-time railroad operations and movement.
- *Building and repairing of track.* About 5,100 employees work in crafts that build and repair tracks across the system.
- *Maintenance and repair of equipment.* Approximately 3,970 employees work in facilities that maintain and repair rail cars and locomotives. They include diesel mechanics, electricians, and shop laborers.

### **Health Achievement Overview**

Union Pacific Railroad has a long and proud history of commitment to safety and health in its industry. The programs described below constitute only a small portion of the company's comprehensive efforts in this area. They were selected to demonstrate Union Pacific's exceptional approaches to promoting the well being of both its employees and their communities.



## Healthy People

### **Operation Red Block**

Union Pacific Railroad has an aggressive and comprehensive rehabilitation assistance program for alcohol and drug-dependent employees. One program in this area, Operation Red Block, began in the early 1980's and continues today. Operation Red Block was one of the first programs in the industry to advocate peer-to-peer intervention to reduce alcohol and drug use. (The program is named for the signal that stops trains.) If employees either refer themselves or are referred by a peer for treatment, they are exempt from the company's disciplinary process for drug use if they cooperate with their treatment plans. A second episode, however, results in termination. Individuals may return to work after successful treatment.

Operation Red Block works in tandem with a very active Employee Assistance Program (EAP). Through EAP, treatment plans are tailored to the needs of each individual, provided at no cost, and are confidential. In addition, the Employee Assistance Program offers assistance to deal with numerous issues from depression to work-related anxiety. The recidivism rate for this program is a remarkably low 8 to 10%.

Union Pacific Railroad has an aggressive and comprehensive rehabilitation assistance program for alcohol and drug-dependent employees.

## Healthy Environment

### **Education**

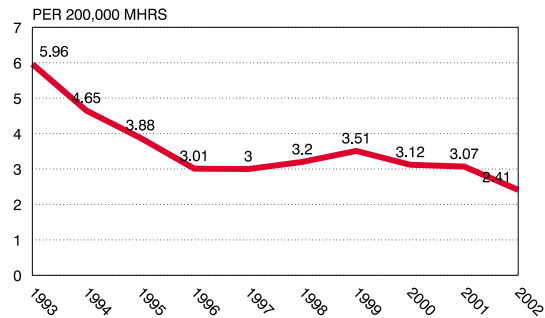
Union Pacific Railroad has a well-established, comprehensive system of employee education in safety promotion and injury prevention. Programs cover a broad spectrum of information from chemical right-to-know information to the elimination of "slip, trip, and fall" hazards. The company maintains an on-going review to identify better means of delivering education.

Due to the geographic dispersion of its employees, one of the company's most effective tools in employee education is its live business television channel (BTV). Through this medium, Union Pacific Railroad reaches a large number of employees, both managers and non-managers. Broadcasts feature live shows where safety procedures are discussed and demonstrated and where question and answer formats help clarify safety issues. In addition to television, training is delivered through videotape and web sites since most work sites are equipped with instructional multimedia systems.



The company gauges its success in employee education by the rate of reportable employee injuries per 200,000 man-hours. From 1993 to 2002, the company experienced a steady downward trend in this area, with the exception of one upturn during the last merger.

**Employee Reportable Rate  
1993 - 2002**



The company uses vending machines to dispense protective devices in addition to distributing them through normal supply channels.

### Vending for Personal Protective Devices

At Union Pacific Railroad, safety programs for the use of personal protective devices are mature activities, fully deployed, and constantly being improved and expanded. Since employees work various hours and have many operating locations, the railroad has taken an innovative approach to making protective equipment as available as possible to its workforce. The company uses vending machines to dispense protective devices in addition to distributing them through normal supply channels. Employees enter their personnel IDs into the system to vend items so there is control for appropriate usage. The company has 200 vending machines that provide batteries, lamps, eye-wear, gloves, and hearing protection. In 2001, the machines dispensed 730,000 units.



## Environmental Protection

Union Pacific Railroad is committed to protecting the environment for its customers, employees, and the communities in which they live. The company strives to incorporate leading-edge technology in its fleet to promote clean air and fuel efficiency. This is consistent with the fact that since 1994, the railroad has achieved an 11% improvement in fuel efficiency.

By December 2002, the company will have acquired more than 1,400 new fuel-efficient locomotives and will have retired more than 1,100 older units. This represents 20% of the fleet and gives Union Pacific the youngest and most eco-friendly fleet in the industry.

More than 400 locomotives are fitted with an automatic stop-start technology to shut down when conditions permit. This reduces fuel emissions by decreasing the amount of idle time for locomotives. All new locomotive acquisitions will have this feature.

## Recognition of Responsible Shippers

Non-accident releases of chemicals make up the largest portion of hazardous material incidents resulting in delays, injuries, environmental damage, and cleanup costs. Union Pacific Railroad's efforts alone cannot significantly reduce these problems. To increase the awareness of shippers about this situation and to bring them closer to the transportation process, the company instituted the Union Pacific Chemical Transportation Pinnacle Award in 1994 to recognize those shippers who make notable contributions to the prevention of non-accident chemical releases. In 2001, the railroad recognized 29 winners based on carload handling statistics. The company credits this award program with helping to achieve a 28% reduction in the number of non-accident releases from 1994 to 2001.

Non-accident releases of chemicals make up the largest portion of hazardous material incidents resulting in delays, injuries, environmental damage, and cleanup costs.



## Healthy Company

### **A Program in Progress**

Over the years, Union Pacific Railroad has received national awards and recognition for its employee health promotion program. There is a strong and ongoing commitment to addressing life style related factors among its workforce. For example, according to a recent claim study, in 1990, 29% of its total health care costs were related to lifestyle factors, such as smoking. By 2001, that percentage had been reduced to 18.8%.

The company considers its health program to be part of an evolutionary process. To determine the best intervention strategies for its particular workforce, it actively engages in systematic evaluation and research.

The railroad is strongly committed to an active research agenda to understand not only the effectiveness of intervention strategies in reducing risk factors but also an employee's acceptance of various interventions. To assist in some of its research, Union Pacific Railroad has enlisted the expertise of government and corporate sponsors. Current research projects are directed to:

The railroad is strongly committed to an active research agenda to understand not only the effectiveness of intervention strategies in reducing risk factors but also an employee's acceptance of various interventions.

- Determining the most effective intervention strategies for employees to reach and maintain their optimum weight.
- Developing blood glucose testing frequency guidelines to better manage diabetes.
- Investigating how stage-based messaging can be used to help employees manage their weight (grant from the National Heart, Lung, and Blood Institute).
- Studying how stage-based messaging can help employees control their cholesterol (grant from the National Heart, Lung, and Blood Institute).
- Quantifying the loss of productivity costs associated with various lifestyle risk factors and chronic health conditions (study with Harvard Medical School).
- Designing an outreach model to influence community health policies and procedures in order to promote employee health in a more comprehensive setting.
- Educating a community about the importance of adequate sleep and alertness among its employees and members.



*"I am very glad the health fairs are active on the Union Pacific and that I had the opportunity to be tested. I know I would have never gone in to a doctor to be checked and could have become blind or with very poor vision."*

*"I invited our health promotion representative to make available health screening in October of 2002. When first shift was almost finished, I was busy and tried to bow out gracefully, but Alexis would not have that and stated I could sit right in my office to have the tests done. A few minutes later she came back and stated that I seriously needed to see a doctor. I joked about it and didn't take it seriously until I requested a second test, and she said my blood sugar actually went up! She explained all about diabetes in details. I really didn't want to know, and what kind of problems I could be in for if I didn't go to a doctor. I didn't."*

*"While I was driving in an unfamiliar area THE NEXT DAY, I found that I was having trouble seeing the signs and decided that I needed new eyeglasses. But because of the health screening results, the next day I was in a doctor's office and he tested me with a variety of tests, came in a couple of minutes later and said he was almost positive that I was diabetic. I went to the hospital to have tests and I was verified as a diabetic. I had fluid on my eyes and the doctor said that without treatment I would have been blind."*



*"I am glad the Union Pacific participates in this type of health care and that we have Alexis and people like her that take an interest in us."*

*Steve Slaght  
Director of Mechanical Maintenance,  
Car and Locomotive for the Kansas City Service Unit*

"I am very glad the health fairs are active on the Union Pacific and that I had the opportunity to be tested. I know I would have never gone in to a doctor to be checked and could have become blind or with very poor vision."



## Management and Leadership

Union Pacific has a vision to be the "Healthiest Company in America." Senior management evaluates the progress toward achieving this goal with every quarterly business plan review.

Union Pacific Railroad is a process driven company with reviews and continuous cycles of improvement. The employee health programs have a four-tiered feedback process. The most basic level is direct employee feedback, both ideas and complaints. These are reviewed and if there are problems, they are solved. The second feedback tier is a review of the data systems that support various processes. Goals are set yearly with monthly targets. If the targets are not achieved on time, plans are developed to improve performance or if environmental factors are thought to be an influence, plans may be changed. The third tier of feedback on company programs comes from benchmark activities, including the external reviews, which come with formal awards programs, and internal benchmark reviews. The fourth tier is the annual planning process where safety and health processes are evaluated in light of what the future environment should bring and how the science in this area is advancing.

## Conclusion

Union Pacific Railroad has a strong senior management and is committed to health, safety, wellness and productivity. As an example, throughout the railroad there are long-term commitments to areas that have the potential to have a huge financial impact on the company. These commitments are called "Big Financial Deals," and include items such as derailment prevention and fuel management. Health and Welfare has been designated a "Big Financial Deal" at Union Pacific. The goal of the Health and Welfare "Deal" is to substantially reduce health care costs and increase productivity. The senior management is committed to this goal for the long term and has already seen significant health care cost reductions as a result.

Health and Welfare has been designated a "Big Financial Deal" at Union Pacific.

# *Appendix A*





## Corporate Health Achievement Award: Prior Award Winners



### 2002 Recipients

**Bristol-Myers Squibb Company's (BMS')** mission is to extend and enhance human life by providing the highest quality health care products and services. BMS's medicines are making a difference in the lives of millions of customers across the globe. In 2001, total company sales for BMS were approaching \$20 billion worldwide. Twenty-eight product lines recorded annual global sales of more than \$100 million each. What has enabled BMS to achieve market leadership – and provide superior value to hundreds of thousands of shareholders – is an unwavering commitment to the values of excellence, reliability, growth, innovation, fairness and good citizenship.

**Eli Lilly and Company** is a leading innovation-driven pharmaceutical corporation. They are developing a growing portfolio of best-in-class – often first-in-class – pharmaceutical products by applying the latest research from their worldwide laboratories, by collaborating with eminent scientific organizations, by making use of the most up-to-date technologic tools and by providing exceptional service to their customers. Through these internal programs and external initiatives, Lilly is seeking answers for some of the world's most urgent medical needs. Lilly employs more than 41,000 people worldwide and markets its medicines in 158 countries. Lilly has major research and development facilities in nine countries and conducts clinical trials in more than 60 countries.

**International Business Machines (IBM)** strives to lead in the creation, development and manufacture of the industry's most advanced information technologies, including computer systems, software, networking systems, storage devices and microelectronics. Their worldwide network of IBM solutions and services professionals translates these advanced technologies into business value for our customers. IBM's worldwide research labs work in all areas of information technology, from physics and cognitive science to leading-edge application research. IBM, with nearly 3,000 researchers worldwide, has research laboratories in eight locations in six countries, and has cumulatively produced more research breakthroughs than the rest of the industry combined. IBM has employed five Nobel laureates. IBM scientists have been awarded the National Medal of Technology – the highest award for technological innovation in the U.S. six times, and the National Medal of Science three times.

**Kerr-McGee Corporation** is an Oklahoma City-based company with assets of \$11 billion. The company is engaged in two worldwide businesses – oil and gas exploration and production with the production and marketing of titanium dioxide pigment. With proved reserves of more than 1.5 billion barrels of oil equivalent at year-end 2001, Kerr-McGee ranks among the largest U.S.-based independent exploration and production companies. Kerr-McGee is committed to quality, safety, environmental responsibility and ethical conduct. Quality is a priority, and 16 of the company's operations and units have met strict requirements for certification under the ISO 9001 and 9002 international quality standards. Safety and environmental management systems have been integrated into the company's worldwide operations.

**Vanderbilt University** is a comprehensive research university in Nashville, Tennessee, providing innovative programs, state-of-the-art facilities and a supportive environment for interdisciplinary inquiry. The University comprises 10 schools, a public policy institute, a distinguished medical center and The Freedom Forum First Amendment Center. Vanderbilt offers undergraduate programs in the liberal arts and sciences, engineering, music, and education and human development, as well as a full range of graduate and professional degrees. Employing more than 1,900 full-time faculty, part-time and clinical faculty of approximately 1,500 and staff of more than 13,000, Vanderbilt is the largest private employer in Middle Tennessee and the second largest private employer based in the state.



## 2001 Recipient

**The National Security Agency/Central Security Service (NSA/CSS) Office of Occupational Health, Environmental and Safety Services (OHES)** is based in Fort George G. Meade, Md. NSA/CSS, a division of the U.S. Department of Defense, is the keystone of the U.S. cryptologic system. NSA provides foreign signals intelligence information to U.S. policymakers and the military while it also protects U.S. national security-related information systems.

## 2000 Recipients

**Dow Chemical Company** is a leading science and technology company that provides innovative chemical, plastic and agricultural products and services to many essential consumer markets. With annual sales of \$19 billion, Dow serves customers in 162 countries and a wide range of markets that are vital to human progress, including food, transportation, health and medicine, personal and home care, and building and construction, among others. Committed to the principles of sustainable development, Dow and its 39,000 employees seek to balance economic, environmental and social responsibilities.

**GE Power Systems** – From turnkey power plants to full financial services, project development to engineering and design and total life cycle service, GE is uniquely prepared to fulfill world demand for abundant, reliable and efficient energy well into the next century. The diverse products and services of GE Power Systems represent one of the industry's most impressive portfolios, ready to serve the full spectrum of power needs from wellhead to consumer.

**Sherman Health Systems** is the largest network of medical care facilities in the far Northwest suburbs of Chicago, Illinois, and includes Sherman Hospital, Sherman West Court (a long term care facility), Sherman Home Care Partners and two immediate care facilities. Sherman Hospital is a regional heart center, performing more cardiac procedures than any other hospital in Kane, Mc-Henry, DuPage, Lake, and Will counties. Other hospital services include emergency services and Level II Trauma Center, oncology services, diabetes center, orthopedic care and the birthing center with a neonatal intensive care nursery.

## 1999 Recipients

**AlliedSignal Inc.** is an advanced technology and manufacturing company serving customers worldwide with aerospace and automotive products, chemicals, fibers, plastics and advanced materials.

**City of Indianapolis & Marion County Sheriff's Department**, the occupational health program, "A Vision for a Healthier Community," covers 4,200 employees of the City of Indianapolis who provide services to over one million residents. Goals for the program are public safety, health program leadership, population and outcomes focus, and healthier community leadership. It illustrates the success of a public-private partnership and is supported by a strong joint labor-management relationship between three unions, administration and an interdisciplinary network of providers. There are six departments – administration; metropolitan development; capital asset management; public safety; public works; and parks and recreation. The scope of the program includes health promotion and disease prevention, outcomes research, fitness, special services for public safety, employee assistance program and chemical dependency, information services, and occupational injury and rehabilitation.

**Baltimore Gas & Electric Co.**, is a member of the Constellation Energy Group (NYSE: CEG), which in 1999 reported nearly \$3.8 billion in revenues and \$9.7 billion in assets. Constellation Energy Group is a holding company whose subsidiaries include energy businesses focused mostly on power marketing, generation, and portfolio management, plus BGE, which provides service to more than 1.1 million electric customers and more than 584,000 gas customers in Central Maryland.

## Appendix A



**Glaxo Wellcome Inc.**, headquartered in Research Triangle Park, N.C., is a pharmaceutical research and manufacturing company. Glaxo Wellcome conducts research in a variety of therapeutic areas, though it is particularly known as a leader in respiratory, central nervous system, AIDS/HIV and anti-infective research.

### 1998 Recipients

**IBM** is the world's largest information technology provider (hardware, software and services) with 1998 revenues of more than \$87 billion and is the worldwide leader in e-business solutions.

**The Boeing Company** faces unique challenges in its employee safety and health programs. The company has field representatives in 60 countries. Employees are dispersed in facilities as small as single-person offices to complexes large enough to house 74 football fields.

**Johnson & Johnson** with approximately 99,000 employees is the world's most comprehensive and broadly based manufacturer of health care products, as well as a provider of related services, for the consumer, pharmaceutical and professional markets. Johnson & Johnson has 190 operating companies in 51 countries around the world, selling products in more than 175 countries.

**First Chicago NBD** is the nation's ninth-largest bank holding company, with assets of \$11.4 billion. The corporation has more than 35,000 employees, two-thirds of whom are women, and operates a total of 10 worksite occupational medical units in Illinois, Michigan, Indiana, New York, New Jersey, and Delaware.

### 1997 Recipients

**Hughes Electronics Corporation** is the world's leading provider of digital television entertainment, satellite services and satellite-based private business networks, and is a unit of General Motors Corporation.

**Lockheed Martin Energy Systems** is a global enterprise principally engaged in the research, design, development, manufacture and integration of advanced technology systems, products and services. The Corporation's core businesses are systems integration, space, aeronautics, and technology services.

# *Appendix B*



### CHAA STEERING COMMITTEE



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