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**A Strategic Focus on Workers, the Public and the Environment: DynMcDermott
Petroleum Operations Company**

William R. Nance, Jr.
The McAfee School of Business Administration
Union University

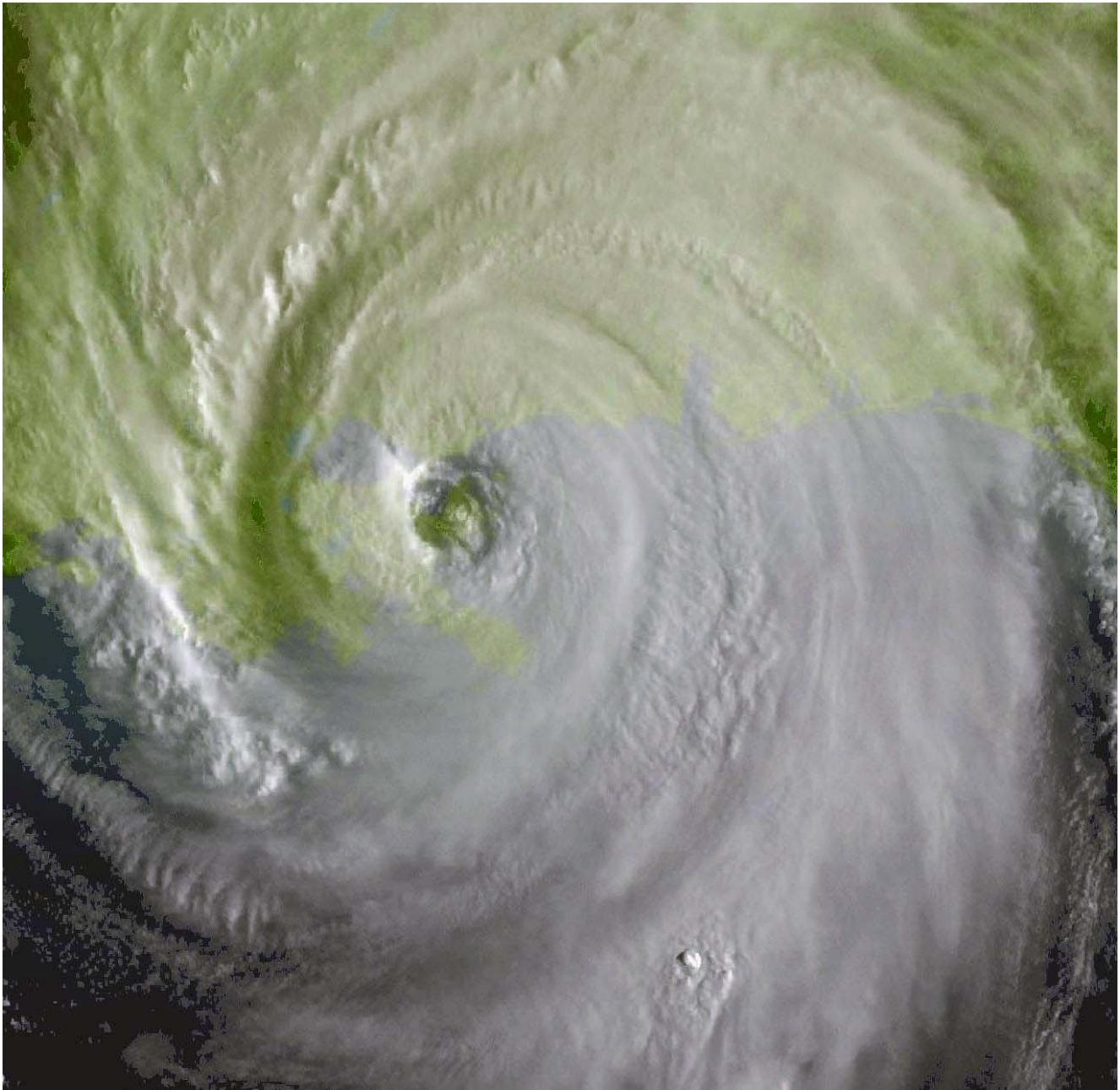
William Bozzo
Suzanne Broussard
Ron Schulingkamp
DynMcDermott Petroleum Operations Company

Mei-Li Lin
The National Safety Council

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Figure 1: Hurricane Katrina making landfall on the Louisiana-Mississippi Gulf Coast



Source: US National Aeronautics and Space Administration. (2005)

Introduction: Prepared for Crisis

In the early morning hours of August 29, 2005, Hurricane Katrina made landfall as a Category 3 storm in southeast Louisiana (Figure 1). Katrina, one of the deadliest hurricanes in United States history, left approximately 1,900 dead and many more injured. Its 100-mile wide destructive impact was felt most significantly in New Orleans, Southeast Louisiana, and Gulf-Coastal Mississippi.^{1,2}

In the days following Katrina, DynMcDermott Petroleum Operations Company (DynMcDermott), operator of the United States Strategic Petroleum Reserve (SPR) under contract with the Department of Energy (DOE), moved its headquarters from the heart of the storm's devastation in New Orleans to an emergency operations center near Beaumont, Texas.³ Less than five days after Katrina hit the Gulf Coast – and despite the displacement of many of its Louisiana-based employees – DynMcDermott had restored operations and assured oil refiners that it was fully functional if needed and as ordered by the President of the United States.^{4,5}

Less than a month after Katrina forced DynMcDermott's move to Beaumont, Hurricane Rita made landfall near the Texas-Louisiana border. DynMcDermott once again relocated its emergency operations center, this time to a location near Baton Rouge, Louisiana.⁶ During this time, President Bush ordered a "drawdown"⁷ from the SPR to mitigate the economic impacts of the disruption of crude oil supply caused by these natural disasters. Although the company's headquarters had to be relocated twice – each time over 200 miles – DynMcDermott made its first drawdown and oil deliveries just three days after Rita's arrival.

In the midst of the devastation caused by the two storms, examiners for the Malcolm Baldrige National Quality Award, previously scheduled for a site visit, offered to reschedule their planned audit. DynMcDermott CEO Robert McGough instead invited them to "come on down."⁸ The Baldrige examiners saw DynMcDermott's emergency management process firsthand as it was put into action during this crisis. DynMcDermott received the Baldrige Award later that year.⁹

In a press release upon DynMcDermott's receipt of the Baldrige Award, United States Secretary of Energy Samuel Bodman called the organization's performance during the crises caused by Katrina and Rita "heroic," and drew specific attention to their ability to maintain normal operations, "even while their own employees faced losses and displacement from their homes."¹⁰ For their part, CEO McGough and other senior managers at DynMcDermott gave credit to the company's Baldrige-based business management approach – featuring environmental, safety, and health (ES&H) management systems built around ISO 14001 and ANSI Z10 – for the firm's management excellence. As DynMcDermott stated in its application for the National Safety Council's Robert W. Campbell Award, "we believe that these...management systems complement and support each other, resulting in top business performance...because of (not in spite of) our focus on the worker, the public, and the environment."¹¹

Background: A Unique Operating Environment

The Strategic Petroleum Reserve

Oil is arguably the world's most critical commodity. Global crude oil sales top \$1 trillion annually, with production occurring in over 65 countries.¹² Many of these oil-producing countries depend upon oil revenues for a significant portion of their overall economic growth and health.¹³ As of 2005, worldwide demand for oil stood in excess of 85 million barrels per day¹⁴ and continues to increase as nations such as China and India experience rapid industrialization.¹⁵

The demand for crude oil derives from the demand for refined petroleum products, which are vital not only for transportation, but for the generation of electricity, home and business heating, and the raw material of the 21st century's most ubiquitous commodity – plastics. Taking into account only the basic supply chain-related functions of exploration and drilling, refining, and the operation of retail gas stations, the oil industry in the United States provides nearly 1.2 million jobs.¹⁶ In short, a reliable supply of crude oil is important for the economic health and the security of the United States.

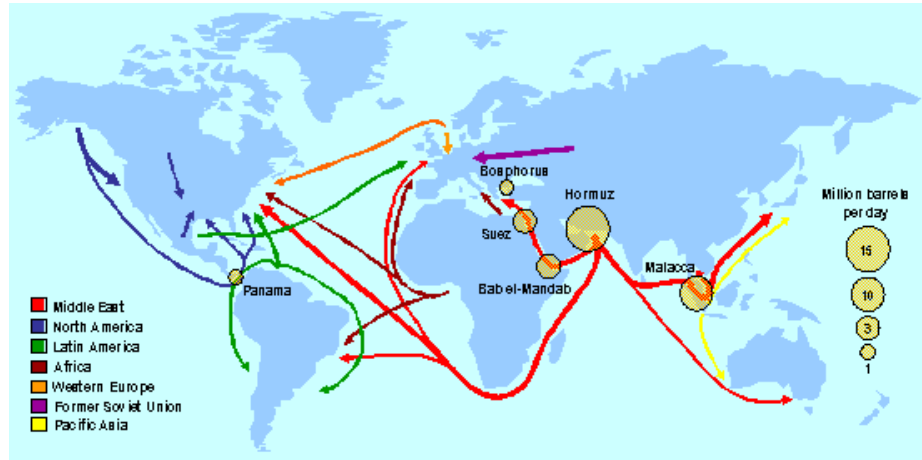


Figure 2: Major Crude Oil Transportation Routes and Chokepoints

The supply chain that provides refined petroleum products is long, complex and fragile. Crude oil is transported thousands of miles by ships and pipelines (Figure 2). This oil is then processed

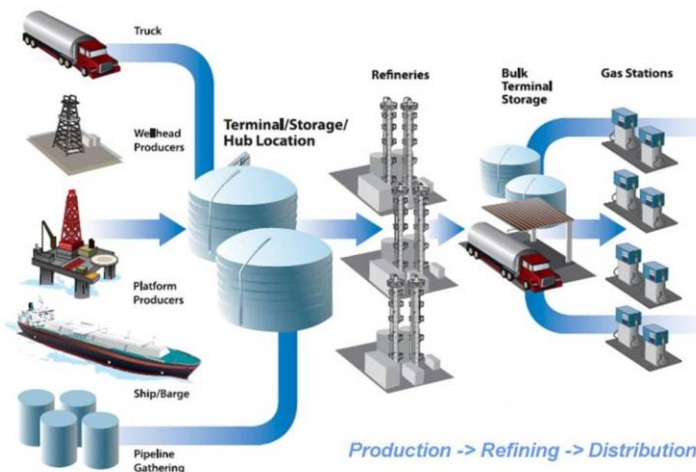


Figure 3: Production through Distribution Process

into value-added products such as gasoline, diesel and heating oil in complex, costly refineries, and delivered to customers (Figure 3). The petroleum industry's efficient management of this supply chain has made it paradoxically difficult to convince consumers and policy-makers that they receive

good value for money in petroleum products. Strong supply chain management also creates a lack of appreciation for that very supply chain – except when significant disruptions to supply result in shortages and rapid price increases.¹⁷

It was in response to one such significant disruption to the supply of crude oil that the United States Strategic Petroleum Reserve (SPR) was created. In 1973, the Organization of Arab Petroleum Exporting Countries (OAPEC) placed an embargo on crude oil sales to the US and other nations. OAPEC also reduced overall crude oil production levels. As a result of this embargo and the reduced levels of oil output, the price of crude oil rose dramatically in 1973 and 1974.¹⁸

In response, a number of non-OAPEC countries created the International Energy Agency (IEA) to determine appropriate responses to energy crises, one of which was the creation of strategic reserves of crude oil. Nations participating in the IEA commit to maintaining emergency petroleum reserves, reducing the demand for petroleum when emergencies arise, and sharing oil stocks and reserves among participants to help spread shortages among member states.

The United States Congress, mindful of U.S. post-embargo experiences, authorized the SPR in the *Energy Policy and Conservation Act of 1975* (EPCA, P.L. 94-163) to prevent repeated economic dislocation and strategic concerns caused by an oil embargo. For this reason, the SPR's focus is on mitigating supply chain disruptions to the flow of oil.

Physically, the SPR inventory is maintained at four underground storage facilities constructed in naturally occurring salt domes¹⁹ located in Gulf-Coastal Texas and Louisiana (Figure 4). The Gulf Coast accounts for over 50 percent of United States crude oil production and nearly 50 percent of its refined product output,²⁰ so locating the SPR in this region makes both economic and operational sense. By 2005, the capacity of the SPR was 727 million barrels. Approximately 700 million barrels were in storage prior to Hurricanes Katrina and Rita in late summer 2005.²¹



Figure 4: Strategic Petroleum Reserve Sites

The SPR is controlled by the Department of Energy (DOE) which employs private-sector contractors to operate what are essentially government-owned facilities (known as government-owned, contractor operated, or “GOCO” facilities).

The GOCO Environment

The DOE determined that a GOCO approach was appropriate for the management of the SPR from its inception. This approach allows both government and the private sector to focus on those areas for which each is best suited. The government focuses on defining program mission areas in alignment with policy, including desired mission implementation outcomes, and provides general program oversight. The private sector focuses on mission implementation using best business practices, resulting in improved performance at a lower overall cost. The GOCO concept provides a tradeoff for private sector firms holding these contracts with the government. Contractors trade a lower level of profit than otherwise might be expected for immunity from certain risks arising from the operation of a particular facility.²²

The earliest GOCO arrangements were implemented between the military services and the private sector during the Second World War and involved the production of explosives and munitions.²³ Since the end of World War Two, the government has continued to make use of the GOCO concept, especially in defense and energy-related programs. Perhaps the greatest current challenges facing both the government and contractors involved in GOCO contracts are environmental concerns and the safety and health of facility employees and people in surrounding communities. This is especially salient as significant environmental risks are often intrinsic to the work performed at these facilities. Not surprisingly, GOCO sites managed by the Departments of Defense and Energy have come under increasing environmental scrutiny from both governmental bodies and environmental activist agencies.

Both the government and the public have grown frustrated with the consistent underestimation of the time and money required to implement preventive environmental policies and measures, mitigate damage from ongoing operations and clean up sites already damaged by past practices. As public levels of environmental concern and frustration with the pace of environmental progress have increased, the risk of lawsuits alleging that the government and its GOCO facility contractors are liable for cleanup costs, personal injury, and property damages has also increased. Risks to the government and contractors arising from employee safety and health issues have paralleled these environmental issue risks.

While contractors historically have received limited immunity under government contracts from the risks associated with operation of a facility, including those costs associated with occupational illnesses and injuries experienced by contractor employees, the ability of the government and its contractors to shift these risks has decreased. Insuring against the costs of fines has never been possible. Recently, contractors have found that insurance for environmental damage or cleanup costs is unavailable at any price, and that the cost of insuring against employee health and safety claims makes such coverage nearly unobtainable. Referring to environmental risks, the operating contractor at an Army ammunition plant noted, “(t)his lack of insurance is not limited to releases of materials that are toxic, nuclear, or hazardous, but extends to the environmental consequences of the releases of all chemicals, constituents, wastes, or materials.”²⁴

The GOCO approach to the management and operation of critical national facilities such as the SPR still provides significant benefits to both government and industry. However, risks borne by both contractors and the government have significantly increased, in turn increasing the relative importance of ES&H performance. To be considered successful, a GOCO program must now not only provide the promised product or service at the agreed-upon price – it must do so in a safe, environmentally sound manner.

DynMcDermott: History, Operations, and Strategy

Formation through 2000

DynMcDermott Petroleum Operations Company was formed in the early 1990's as a wholly-owned, subsidiary joint venture between Computer Sciences Corporation (formerly DynCorp), BWXT Federal Services, Inc., Jacobs Engineering Group, and International-Matex Tank Terminals Petroleum Management.²⁵ DynMcDermott was created for one purpose - to successfully manage and operate the United States SPR as the DOE reopened competitive bidding for the contract in 1992.²⁶ DynMcDermott received its first contract to operate the SPR in 1993 and has managed the SPR continuously since then, with a second contract awarded in 2003. The current contract runs through 2008, with a renewal option (that was exercised) through 2013.²⁷

One of the conditions imposed upon SPR contractors by the DOE is that the contractor may have no other customers.²⁸ For this reason, the SPR contract has typically been held by wholly-owned subsidiaries of larger firms or, as in the case of DynMcDermott, an independent corporation privately held by a consortium of firms. Under the operating contract, all costs and expenses associated with the operation of the SPR are paid by the DOE. Any profit is based upon the contractor's performance against a number of contractual goals. This arrangement is common to most GOCO contracts and is termed a "cost plus award fee" or "cost plus incentive fee" arrangement.²⁹

At the time DynMcDermott submitted its first proposal to the DOE in mid-1992, the SPR contract was held by Boeing Petroleum Services (BPS), a subsidiary of Boeing Corporation, which operated the SPR from 1985 through 1992.³⁰ In 1992, Boeing's management decided not to participate in future SPR contracts. Competition for GOCO contracts can often be fierce, and the competition for the DOE's SPR contract certainly was. The DOE initially received over a half-dozen responses to its Request for Proposals. Three finalists were selected, one of which was DynMcDermott

In 1992, DynMcDermott identified three key DOE concerns that needed to be addressed by any successful bidder for the SPR contract:

1. A move to a new operating contractor should in no way compromise the operational readiness of the SPR,
2. This move should provide not only a continuation of the *status quo*, but actually improve management effectiveness and cost efficiency – especially in light of anticipated Congressional budget cuts, and

3. The complacency of the organizational culture at the SPR should be addressed - employees and managers needed to proactively seek operating improvements.³¹

DynMcDermott's approach to the first concern was to demonstrate that the joint venture would be able to draw upon the expertise in petroleum industry "know-how" possessed by its parent companies. In addition, a detailed plan to retain certain incumbent BPS managers, professionals and employees was provided, along with their "letters of commitment."³² Moreover, DynMcDermott committed to seriously consider the opinion of the DOE regarding the retention of incumbent personnel deemed important to operational success, even when DynMcDermott's intent was to replace incumbents with members of the new DynMcDermott team.³³

DynMcDermott determined that the second and third DOE concerns required an approach based upon the culture of employee involvement and empowerment inherited from its parent corporations. DynMcDermott's commitment to positive cultural change was key to both winning the SPR contract and sustaining long-term success. The organization committed to implementing several complimentary programs designed to foster this change in culture, including:

1. An improved environmental, safety and health management program,
2. A new focus on continuous quality improvement,
3. An internal performance "self-assessment" program,
4. An improved employee recognition and reward system, and
5. An improved employee training and development program.³⁴

DynMcDermott's shareholders knew that a more decentralized management approach, with decision-making authority "closer to the ground," was both desired by the DOE and aligned with its parent firms' cultures of employee empowerment and initiative. DynMcDermott's cultural change efforts began with the implementation of a behavioral safety program and improved employee training and development. These two efforts were considered keys to gaining the employee trust and buy-in needed to move forward toward a more team-based, continuous improvement culture at the SPR. At the same time, DynMcDermott began working toward the International Organization for Standardization (ISO) 14000 and 9000-series certifications.

Certification under the ISO 9000 series of standards assures customers that the goods or services are produced under a functioning quality management system meeting recognized international standards of excellence. The ISO 14000 series of standards assures that an organization has a management system in place to support environmental protection and the prevention of pollution in balance with social and economic needs. The American National Standards Institute (ANSI) adopted the ISO 9000-series in the early 1990's and the ISO 14000 series in the late 1990's. These standards together require documentation for all processes affecting quality and the environment, drive a mindset of continuous improvement, and identify significant environmental aspects of a facility, providing a process to mitigate risk and hazards to the public and the environment.³⁵

Congress and the DOE have identified three ongoing key mission-related outcomes for the SPR operating contractor, which are:

1. Maintaining operational readiness, defined as storing and providing petroleum “to reduce the adverse economic impact of a major petroleum supply interruption to the United States and (carrying) out obligations under the International Energy Program,”³⁶
2. Meeting the contractual requirements of the SPR M&O contract, and
3. Providing a safe, environmentally sound, and effective management and operating infrastructure.³⁷

From its assumption of the SPR contract in 1993, when these improved management systems, programs, and standards were put in place, DynMcDermott has improved operational readiness, contractual performance, workforce safety and development, and environmental stewardship. DynMcDermott’s cultural change efforts, clearly, paid off. Exhibit 1 provides a list of some of the many awards and certifications DynMcDermott received between 1994 and 1999. DynMcDermott’s determination to affect cultural change laid the foundation for ongoing improvement and success.

Year	Award or Certification
1994	Secretary of Energy's Award for Best Practice: Quality
1995	DOE Quality Commendation Award
1995	DOE Small Business Special Performance Award
1996	The President's Hammer Award for the Contractor's Purchasing Council
1996	DOE Quality Champion Award
1996	Louisiana Quality Award
1996	DOE Fossil Energy Environmental, Health & Safety Achievement Award for Behavioral Safety
1996	Southwest Louisiana Quality Award
1996	APEX Award for "SPRO Zone" (Video)
1997	Semi-Finalist, USA Today Quality Cup Competition
1997	DOE Quality Champion Award
1997	DOE Pollution Prevention Award
1997	Louisiana Governor's Award for Emission Reduction
1997	Honorable Mention, International CINDY Competition (Video)
1998	Louisiana Governor's Award for Mentoring Small Business
1998	DOE Fossil Energy Environmental, Health & Safety Achievement Award for Tank Cleaning Innovation
1998	American Building Council National Excellence in Construction Award
1998	Louisiana Governor's Environmental Achievement Award: Mentoring Contractors on Waste Minimization
1998	APEX Award for Communication Concepts Excellence (Video)
1999	Texas General Land Office "Oil Spill Preparedness, Prevention and Response" Award

Exhibit 1: DM Awards and Certifications, 1994-1999

Current Strategic Approach: 2000 and Beyond

In order to spur continuous improvement as the organization managed the SPR into the new decade, DynMcDermott leadership developed an organizational purpose with a mission-driven strategy focused on a “systems” model for creating value, effectively operating the organization, and ensuring long-term performance excellence and sustainability. This model is based on the Malcolm Baldrige Criteria for Performance Excellence (CPE), which provides a measurement, analysis, and knowledge management framework for a leadership-driven performance management system.

DynMcDermott recognized that its earlier, more traditional functional approach to management systems had provided a limited understanding of the relationships that are required to create a high-performing organization. The functional approach created sub-optimal situations throughout the organization and restricted communication. Attempts to adapt to changing requirements with new knowledge were treated by the functions as a new fad or program and generally failed to become ingrained into the culture.

Initially, the organization had difficulty obtaining functional buy-in of process management and performance improvement tools. However, focusing on lessons learned from the successful safety, health and the environment initiatives, the executive staff began to apply this “systems approach” to integrate the entire organization into a holistic model. This required different types of strategy and thinking. Systems thinking provides a “discipline for understanding the whole picture and interrelationships rather than things, for seeing patterns of change rather than static snapshots.”³⁸ This type of thinking requires both careful analysis with creativity and insight, and the ability to make judgments about a host of challenges that can’t be reached through analysis alone.³⁹ Linking systems thinking to a closed loop management system ensures strategy and operations are aligned and support the objectives and goals.⁴⁰

Figure 5 shows a two dimensional view of the DynMcDermott core processes. In the center of the figure is the “Mission” – the Drawdown and Fill of the SPR. Moving outward are the “Processes.” The Process area contains value creation processes such as fluid movement, oil accountability, maintenance, security, recruiting, retention, and training. At the core of this approach is the Plan-Do-Study-Act (PDSA) cycle, also known as the Deming Cycle, widely seen as a basic attribute of high-performing organizations.⁴¹

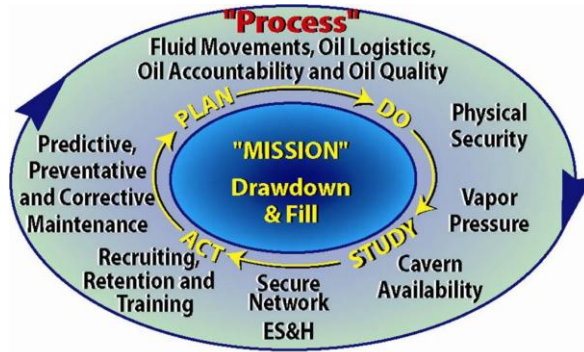


Figure 5: DM Process Relative to Mission



Figure 6: DM Functions Relative to Processes

more interdisciplinary in nature, focusing on systems and behaviors.

Figure 6 shows the addition of another level or region to DynMcDermott’s core processes, depicting organizational structures titled “Functions,” as identified in the traditional organizational chart. The functions of an organization are recognizable and are usually mirrored by academic subjects taught to reinforce the functional view (i.e. accounting, finance and marketing). Subjects like safety, health and the environment are not easily understood by the organization because they are cross-functional and

In Figure 7, DynMcDermott has linked each function to a value creation process or “Adaptive System” in the outermost region of the diagram. Although each function has a multitude of processes, most are supportive of the value creation or core processes to the Mission. Likewise, each function is responsible for the creation and management of effective adaptive systems that affect the entire organization. For example, the Environment, Safety & Health function, with the

support of leadership, created the Integrated Safety Management System, the ISO 14001 Environmental Management System, the EPA Performance Track System and the OSHA VPP Health & Safety System for the protection of the worker, the public, and the environment.

Beyond the concentric circles in Figure 7 are concepts critical to a high-performing organization. Starting at the bottom is the concept of improving effectiveness through strategic planning and project management. Moving clockwise we improve efficiency through process management, capture the value of best practices and lessons learned, and proceed through the processes of innovation, improvement, and benchmarking and developing breakthrough strategies. The arrows on the boundaries of the concentric circles indicate tension and resistance to change created by organizational structure and systems interaction. As circumstances change, the concentric circles may rotate past each other facilitating dynamic re-alignment across processes, systems, and functions, to optimize interactions, efficiency, and effectiveness. DynMcDermott’s systems provide focus on the Mission with an understanding of the processes, organizational structure, and the interactions of the work force. This approach generates “systems thinking” that allows leaders and managers to create mental models to ensure strategies get translated into action.⁴²

Figure 7: DM Systems Relative to Functions

Functionally, DynMcDermott’s current approach to the management and operation of the SPR is an extension and expansion of its early approach. In a strategic sense, too, DynMcDermott’s current focus builds on three “pillars” that it has long recognized as crucial: the worker, the public, and the environment. Each of these pillars contributes to operational, contractual, safety and environmental excellence while enabling DynMcDermott to manage the SPR efficiently. Not only do these three elements contribute to excellence separately, but, more importantly, they provide a combined synergy that amplifies DynMcDermott’s business performance in ways that no single point of focus could.

Focus on the Worker: The Approach

DynMcDermott’s focus on the worker, the first “pillar” of its management strategy, builds upon an understanding of the impact of organizational culture on employee behavior and performance

and, by extension, the firm's strategic performance. An organization's culture is a shared set of values, attitudes, beliefs and expectations, as well as a shared way of perceiving both the internal and external environments. Culture provides the behavioral norms, organizational roles and expectations, and organizational values that characterize a particular firm. Because it guides the decision-making and behavior of individuals, culture has a significant impact on an organization's ability to implement a given strategy effectively.⁴³

DynMcDermott's culture is characterized by a spirit of cooperation, initiative, innovation, and workforce empowerment. DynMcDermott's culture values and rewards continuous improvement, responsible stewardship of the resources under the firm's control, ethical behavior, employee health and safety, and workforce diversity. Organizational management and leadership actively promote, reward and model these cultural characteristics in both formal and informal ways to help ensure their persistence and consistency throughout the organization.⁴⁴ DynMcDermott's focus on the worker, then, begins with the hiring process, continues through training, extends to safety and ethics, and is delivered with a team-based organizational management approach.

Building a culture of cooperation, initiative, innovation and empowerment begins with the finding the right people to fill organizational vacancies. DynMcDermott has a systematic process for recruitment, selection, and hiring called the "Employee Life Cycle."⁴⁵ The process begins when a team comprised of human resource (HR) management professionals and the hiring department work together to ensure that the current position description correctly identifies job tasks, necessary skills, and other requirements. HR also reviews the open position's grade and compensation level to ensure that these reflect the responsibilities and requirements identified by this analysis.

Next, the demographics of the workforce at the hiring location are compared with those of its surrounding community. This helps to ensure that DynMcDermott's workforce at all five locations reflect the diversity of cultures and demographics of the United States Gulf Coast. In addition, DynMcDermott sets affirmative action goals and guidelines based upon these workforce and community analyses as needed. This approach to ensuring adequate workforce diversity goes beyond mere lip service. DynMcDermott maintains an employee-led Diversity Council, which includes participants from the DOE. This council develops a company-wide Diversity Plan that extends beyond the company into direct involvement with the communities where DynMcDermott operates and links with DynMcDermott's Community Outreach Plan (see "Focus on the Public" section).

To attract qualified applicants, all jobs openings are posted on a number of web sites. Local newspaper advertisements are used to ensure that DynMcDermott is recruiting within the worksite's community. Resumes are received by an internal professional recruiter who screens the applicants and collects voluntary affirmative action characteristics to gauge the effectiveness of the recruiting effort. This step helps ensure that candidates selected for further screening meet the identified qualifications, understand the salary and grade structure, and represent a cross section of the community.

Despite its proactive approach to recruitment, finding an adequate supply of workers is one of the most significant challenges facing DynMcDermott today. DynMcDermott's workforce currently averages 48 years of age. DynMcDermott therefore faces a near-to-mid-term future which is almost bound to include the loss of significant numbers of experienced employees in large blocs as these workers begin to retire. In addition, the locations managed by DynMcDermott – especially the headquarters in New Orleans and two Louisiana-based storage sites – suffer from the negative press following Hurricane Katrina, which has made it difficult to recruit outside the region. Finally, DynMcDermott competes with the broader oil industry for many of its workers, whose skills are identical to or easily transferable to the refining, drilling, and exploration carried out by local organizations. Because DynMcDermott must seek approval for compensation rates from the Department of Energy, its levels of compensation have traditionally lagged the broader industry's pay level, making recruitment that much more difficult.

Once hired, employee needs are identified in the employee's Individual Development Plan (IDP), which is a part of the employee's annual performance appraisal, and allows managers and employees to mutually establish training goals and requirements. DynMcDermott uses a combination of videos and one-on-one interaction between employees and supervisors to deliver new employee orientation, diversity training, and records management information.

The company's Professional Development web page provides links to on-line mandatory training courses, and includes online course directories and web-based courses for ongoing professional development. This training is available to all employees for their development and career progression needs. A wide range of external courses are also provided to balance short- and long-term organizational needs with individual employee development needs. DynMcDermott demonstrates its commitment to employee development, education and training by arranging work schedules so that all employees have the necessary time to complete courses or even entire diploma or degree programs.

DynMcDermott uses input from employees combined with a formula that considers the subject matter, importance, difficulty, and performance frequency to determine which method is most appropriate for each training course. For example, management and team-building skill training is highly participative, but a short annual course in security might be computer-based. Operational "demonstrations," such as DynMcDermott's drawdown readiness exercises, are large training simulations that involve many employees and often include DOE representatives, oil industry customers and actual oil movements. Videoconference links at all five DynMcDermott sites enable the organization to bring people together for "virtual" training that might otherwise require extensive, costly travel.

The training department seeks employee feedback throughout the design and delivery process for formal training. Informal training is accomplished using mentors, especially in skilled craft positions. DynMcDermott has developed for many positions a Performance Based Training and Qualification (PBTQ) program that provides guidance to employees and supervisors through checklists for most informal training.

On a structural level, DynMcDermott's knowledge transfer system for training programs for DynMcDermott's mission-critical processes has three components:

1. Managing corporate data and knowledge sharing across organizational locations and functions,
2. Major training events that involve a large number of employees (such as "drawdown" demonstration exercises as described above), and
3. Each location's PBTQ Program, which cross-trains employees and helps to ensure knowledge transfer throughout the organization.

DynMcDermott's focus on the worker extends to worker and workplace safety, health and environmental knowledge training, which form an integral part of employee development right from the start. Numerous courses promote personal, workplace and environmental safety. For example, all employees must complete Health Hazard Awareness, Defensive Driving, and ISO 14001 and ANSI Z10 modules annually. Other courses that are typically included in employee IDPs are Lock Out/Tag Out and Protective Action/Severe Weather training.

DynMcDermott has mature systems to ensure health, safety, security and ergonomics. For example, DynMcDermott's Behavioral Safety System is employee-driven and uses an observation process to evaluate individuals on workplace health factors, safety, and ergonomic behavior. At-risk behaviors observed are discussed with the employee. Data, which does not identify individuals, is collected to determine predominant at-risk behaviors by site and target those behaviors for improvement. A Behavioral Safety web page provides a link for each site's program and findings. Site Safety Councils, comprised of employee representatives, and an Executive Safety Council, comprised of senior managers, meet monthly to review all safety findings, recommend corrective actions or solutions, and provide resources to accomplish them. When solutions are not readily identified, findings are turned over to an improvement team to systematically evaluate the problem and develop a solution.

DynMcDermott uses the United States safety management systems standard, ANSI Z10, to provide validation of the processes used to systematically identify and control hazards. Use of this independent standard verifies a consistent path over time for assuring worker protection. The Line Control Safety process, the Behavioral Safety Process, and participation in the OSHA Voluntary Protection Program (VPP) make up the safety and health component of DynMcDermott's integrated safety management system. Twenty-five percent of top-level performance evaluation measurement criteria are safety-related and all are incentivized, resulting in a direct impact to profitability.

Ethical decision-making and behavior is also emphasized from the beginning of each employee's tenure at DynMcDermott. Each employee must complete an ethical business practices course and sign an acknowledgement of their agreement with DynMcDermott's Corporate Ethics policy.

DynMcDermott's organizational structure and management approach are also intended to develop and maintain a culture of cooperation, initiative, innovation and empowerment. All employees are empowered to innovate and improve processes and much work is

accomplished through self-directed work groups and teams. The team-based approach has proven effective in improving such organizational activities as:

1. Identifying, defining, and improving organizational functions and technical requirements,
2. Determining and providing needed funding or other resources, and
3. Specifying performance metrics and targets.

Formal teams are chartered, and team members are trained “just in time” in team-building, quality management tools, and performance improvement as necessary. A team-based approach allows DynMcDermott to adapt more quickly to changing business needs and to maintain its culture of individual empowerment and authority. When extraordinary organizational resources are required, DynMcDermott uses cross-functional teams, often including contractor supplier personnel, to stretch its resource base and to provide the benefits of diverse skills and perspectives to decision-making and project implementation efforts. DynMcDermott’s team-based approach promotes interdepartmental cooperation and improves “buy-in” across the organization. DynMcDermott systematically uses teams not only for major initiatives, but also for ongoing “line of business” activities and process improvement initiatives.

Focus on the Worker: The Results

The effectiveness of DynMcDermott’s strategic focus on the worker is clearly evident in a variety of key indicators. Among these are employee retention (turnover), employee decision-making, employee understanding of the corporate mission, employee understanding of corporate values, the level of ethical consideration among employees, perceptions of workplace safety, and overall employee satisfaction.

An organization’s rate of retention (or its inverse, turnover) is a good overall indicator of employee satisfaction, motivation and loyalty. Research into the causes of turnover shows a strong relationship between the extent to which employees experience personal growth and development on the job and the rate of employee retention.⁴⁶ DynMcDermott’s retention rate has held steady at an astonishing 97 percent since 2000, against a goal of 90 percent. This suggests that employees have developed a real sense of organizational loyalty and pride, and that factors that tend to create turnover (such as perceptions of unfair treatment, an adversarial labor-management relationship, a lack of opportunities for personal and professional growth, etc.) are largely absent at DynMcDermott’s facilities.

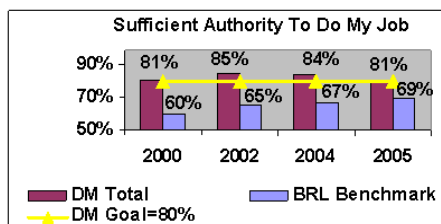


Exhibit 2: Employee Decision Making

Employees’ perceptions of their authority to make decisions serve as an excellent proxy for DynMcDermott’s effectiveness in creating a culture of innovation, initiative and workforce empowerment. As shown in Exhibit 2, over 80 percent of DynMcDermott employees believe they have sufficient authority to make necessary decisions. This compares quite favorably to the Business Research Laboratory (BRL) benchmark over the same period.

An organization’s mission is an important means for communicating organizational values and for giving organizational members a sense of direction and purpose.⁴⁷ Employee understanding of the corporate mission, therefore, is critical, especially for organizations who truly wish to develop a culture of empowerment that promotes continuous improvement for both the business and the individual. Nearly 90 percent of DynMcDermott employees showed a clear understanding of the company’s mission (Exhibit 3). This compares very favorably with the national norms of 72 percent reported by the Society for Human Resource Management (SHRM) and 82 percent reported by the BRL.

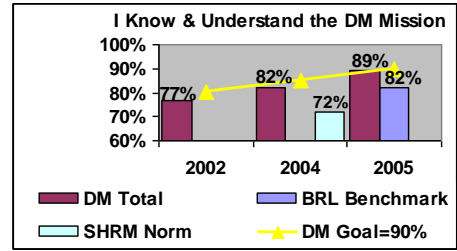


Exhibit 3: Understanding of Mission

Corporate values are more important to an organization’s cultural development than even a well-developed sense of mission.⁴⁸ A mission tells people what should be done; values tell people how to do things. Employee understanding of corporate values is important to the development

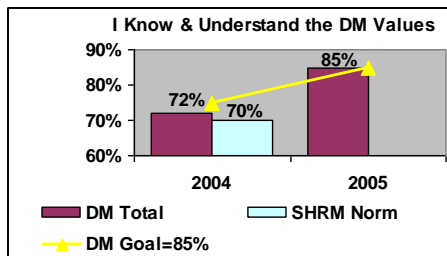


Exhibit 4: Understanding Values

of a positive culture embodying innovation, initiative and empowerment, since these characteristics address the “how” of organizational performance. Nationally, the SHRM reports that approximately 70 percent of an organization’s employees know and understand their company’s values. At DynMcDermott, 85 percent of the workforce demonstrated an understanding of corporate values in 2005 (Exhibit 4), a 13-point improvement over 2004.

Corporate ethics have come under increasing scrutiny in the past few years, especially in the wake of such ethical failures as the Enron and WorldCom debacles. DynMcDermott considers ethical behavior no less central to a positive organizational culture than empowerment, and believes that empowerment of employees requires a solid ethical foundation at all organizational levels. DynMcDermott employees demonstrate a consistently high level of ethical consideration, with 95 percent having a clear understanding of DynMcDermott’s expectations in this area.

If DynMcDermott expects employees to commit to the organization and embrace its culture, then it is axiomatic that employees must believe that the organization is committed to their well-being. No greater evidence of management and organizational commitment to the well being of individual workers exists than the organization’s efforts to create a safe workplace. DynMcDermott employees’ perceptions of workplace safety demonstrate the organization’s effectiveness in creating a safe place for its people to work and in communicating the importance of employee safety at all organizational levels. Over 90 percent of DynMcDermott workers stated that they perceived their workplace as safe (Exhibit 5).

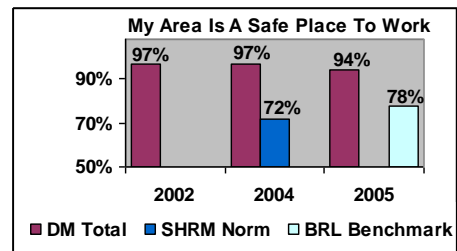


Exhibit 5: Perception of Safety

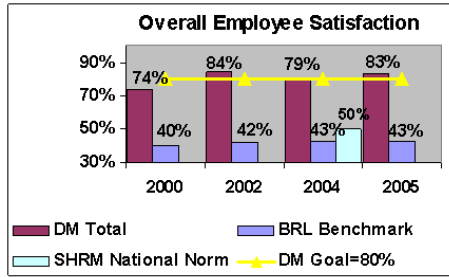


Exhibit 6: Overall Satisfaction

Finally, overall employee satisfaction with DynMcDermott is over 30 percent higher than the national average reported by the SHRM, with over 80 percent of DynMcDermott’s employees reporting overall satisfaction (Exhibit 6). This indicates that the overwhelming majority of DynMcDermott’s people believe that their individual needs and workplace expectations are being met, and it speaks volumes about the effectiveness of the organization’s approach to its workers.

Focus on the Public: The Approach

According to the World Business Council for Sustainable Development, a focus on the public good is an integral part of good overall management. Firms should be managed not only for the financial benefit of shareholders, but also in a manner that improves “the quality of life of the workforce and their families as well as of the local community and society at large.”⁴⁹ DynMcDermott has a strong commitment to improving the quality of life for its workforce, as demonstrated in the “Focus on the Worker” section. DynMcDermott has an equally firm commitment to improving the quality of life in the communities in which it operates and in the broader society of which it is a part. DynMcDermott considers this focus on the public the second “pillar” of its strategic approach.⁵⁰

Community Outreach allows DynMcDermott managers to partner with employees and DOE personnel to support civic, professional, educational, and charitable activities with objectives consistent with DynMcDermott values. All five DynMcDermott locations are active in their local communities, with a focus on mutual assistance, collaborative emergency planning, and support of educational institutions and charitable organizations that provide direct benefits to the residents of the communities in which DynMcDermott employees live and work. DynMcDermott places this particular emphasis on benefiting the communities adjacent to its sites because of the physical impact that its operations could have and the fact that DynMcDermott is a major employer in the rural areas surrounding four of its five locations.

Examples of recent outreach that exemplify this local focus include DynMcDermott’s Bayou Choctaw, Louisiana, site providing an emergency exit route for its community after a train incident identified that community vulnerability, and the Bryan Mound, Texas site providing expertise in oil spill cleanup (unrelated to their operation) to assist the United States Coast Guard, the National Oceanic and Atmospheric Administration, and the State of Texas in recovering an impacted beach. DynMcDermott also partners with organizations, such as state police, county sheriffs, state and federal fish and wildlife services, fire departments, hospitals, the United States Environmental Protection Agency, the United States Coast Guard, and the Lake Pontchartrain Basin Foundation.

Educationally, DynMcDermott has supported the Louisiana National Guard’s Youth Challenge program, which was designed to improve the lives of at-risk youth. This program was recognized in 2004 as the best such program in the nation. In New Orleans, DynMcDermott has

partnered with DOE employees since 1993 as the corporate sponsor for DOE’s annual high school Science Bowl competition.

Many DynMcDermott employees and senior leaders serve on Boards of Directors or hold offices in charities and professional associations, including the Louisiana Quality Foundation, the New Orleans Section of the American Society for Quality, the American National Standards Institute – American Society for Quality National Accreditation Board (ANAB) Council, the Southwest Louisiana Quality Council, the Louisiana Chapter of the National Safety Council, the National Environmental Performance Track Participants Association, the American Society for Nondestructive Testing, the Louisiana Engineering Society, the Louisiana Environmental Leadership Committee, the Women’s Business Council, the American Red Cross, the Peoples’ Free Clinic of New Orleans and the Down’s Syndrome and Spina Bifida Associations of Greater New Orleans.

Focus on the Public: The Results

The effectiveness of DynMcDermott’s strategic focus on the public is measured in a variety of ways, but DynMcDermott specifically sets organizational goals and tracks performance in two key areas – overall Community Outreach Plan accomplishment and Small and Disadvantaged Supplier utilization. The Community Outreach Committee, composed of management and non-management DynMcDermott representatives from all locations, as well as DOE and community leaders, plans initiatives annually. DynMcDermott has reached 100 percent or more of its planned community outreach goals for five consecutive years.

Finding ways to do business with locally owned, small, and disadvantaged companies benefits not only the local community, but also society in general. The local public benefits as “home town” entrepreneurs succeed, while the larger society benefits when small businesses and minority entrepreneurs succeed, providing valuable role models in these communities. DynMcDermott’s performance over the past several years in this area has been impressive (Exhibit 7). DynMcDermott has met or exceeded its aggressive goals in five out of the past seven years. In 2005, Hurricanes Katrina and Rita, which caused the dislocation of many small businesses and their employees in Louisiana and Texas, hindered DynMcDermott’s goal accomplishment. DynMcDermott’s outreach to communities that year included finding housing for employees and their families, continuing full pay while employees were displaced, and assisting employees in returning to their homes. DynMcDermott served as a model of community support during a crisis.

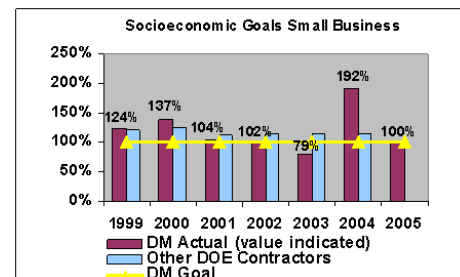


Exhibit 7: Overall Satisfaction

Focus on the Environment: The Approach

The third pillar of DynMcDermott’s strategic approach is a focus on the environment. DynMcDermott’s environmental management system is based on the ISO 14001 standard and is fully integrated with strategic planning, implementation, and evaluation. ISO 14001 forms a basis for establishing performance standards, defining requirements against environmental

aspects that drive budget and resource allocation decisions, and provides full accountability for all processes and outcomes.

The DOE has established 31 critical performance measures in the SPR contract. Eleven of these 31 (35 percent) are related to ES&H performance. DynMcDermott's success in meeting these targets is a major factor in determining the amount of award fee earned by DynMcDermott. The total award fee for 2005 was \$3,130,366, based upon DynMcDermott's record score of 98 out of 100 for critical measure accomplishment.⁵¹

Beyond its impact on profitability, however, an environmental focus is an integral part of DynMcDermott's core values and its strategic approach. DynMcDermott translates its strategies for performance and social responsibility – including environmental performance – into measurable operating requirements. In this way, DynMcDermott helps ensure that all activities are conducted in a visible environmentally responsible manner.

A key element in translating these environmental strategies into measurable requirements has been DynMcDermott's voluntary development of an Environmental Advisory Committee (EAC), which was established to help DynMcDermott anticipate – rather than merely react to – public concerns by engaging members of the surrounding communities and involving them in the SPR decision-making process. The EAC is an external group of scientists, technical experts, and community representatives that provide independent assessments and advice on DynMcDermott's environmental and emergency management efforts. Members are briefed on current and potential program issues at quarterly meetings, and as warranted, members or outside experts also present pertinent information to the committee. EAC members then discuss these issues among themselves and in their communities, providing feedback from their perspectives to DynMcDermott and the SPR. This process provides SPR leadership with invaluable independent insight into the issues of potential public concern before they become contentious, and provides an early opportunity address such concerns. Each DynMcDermott oil storage site, as previously noted, also belongs to various local organizations, including local emergency planning and response committees, with which they coordinate in the event of a facility or community emergency.

Nationally, DynMcDermott personnel serve in a leadership capacity on boards that develop industry technical standards, promoting safer, environmentally sound operations not only for DynMcDermott's benefit, but also for the benefit of industries across the United States. DynMcDermott also publishes an annual SPR Site Environmental Report that details its environmental performance, distributing this report to a variety of stakeholders, including elected officials, local governments, and regulatory agencies. It is available to the general public through the Internet. In April 2005, the National Association of Environmental Professionals presented its annual Environmental Excellence Award for Best Environmental Technology to DynMcDermott and the Strategic Petroleum Reserve, one of many such awards received over the life of DynMcDermott.

Focus on the Environment: The Results

DynMcDermott tracks a number of environmental performance measures, which were developed with input from its EAC, and stemming from significant environmental aspects identified by the ISO 14001 Environmental Management System and regulatory requirements. Among these measures are the availability of spill response emergency equipment, the amount of hazardous waste generated annually, and the number of environmental citations received.

In the event of an environmental incident such as an oil spill, the extent of damage to the environment depends significantly upon the amount of time that elapses before an emergency response unit begins work. The time required to mount an effective emergency response depends in turn upon the availability of spill response emergency equipment. DynMcDermott tracks the “uptime” availability of its emergency equipment as a leading indicator of its preparedness to mitigate any hazardous or environmentally-damaging incident to the fullest extent possible. DynMcDermott has maintained 100 percent availability of this crucial equipment in every year since 2000.

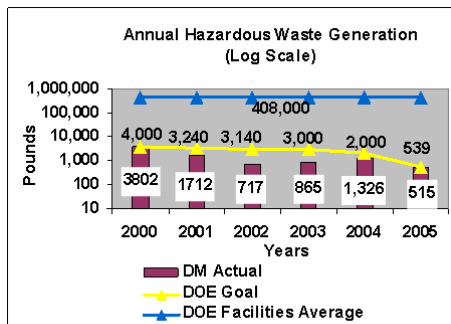


Exhibit 8: Hazardous Waste Generation

The volume of hazardous waste generated by a facility is an indicator of the environmental risk associated with a facility’s operation, with lower volumes generated indicative of lower risk to the public and environment. DynMcDermott tracks the amount of hazardous waste generated annually by waste stream and uses this data in its efforts to continuously reduce waste volume and associated risk, as well as operational costs. Since 2000, DynMcDermott has reduced its overall volume of generated hazardous waste by 86% from its combined 5 facilities to 515 pounds in 2005 (Exhibit 8).

A “bottom line” measure of business model effectiveness in environmental performance is the number of environmental citations received. DynMcDermott has had a single recordable environmental violation over its life as a company, occurring in 1995 for an administrative error (Exhibit 9). This compares favorably with an average of 2.5 violations at DOE’s laboratories and provides overall validation for DynMcDermott’s strategic focus on the environment.

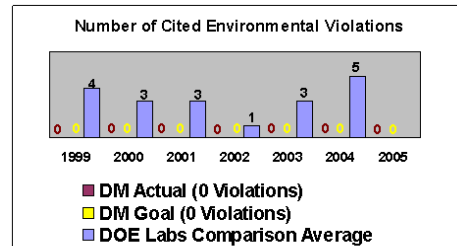


Exhibit 9: Benchmark Violations vs DM

Conclusion: A Three Pillar Approach for Strategic Success

Businesses are created to produce a product, but they must also earn a profit. The product satisfies the needs of the customer, but profit is the “oil in the engine” that ensures ongoing business health and growth.⁵² DynMcDermott’s three pillar approach, with a strategic focus on the worker, the public and the environment, has clearly produced outstanding results in these

specific areas, but what of the overall business results produced? Does DynMcDermott’s approach satisfy the needs of its customer while earning a profit?

To restate them briefly, the DOE’s three key criteria for success at the SPR are:

1. Maintaining operational readiness,⁵³
2. Meeting the contractual requirements of the SPR M&O contract, and
3. Providing a safe, environmentally sound, and effective management and operating infrastructure.⁵⁴

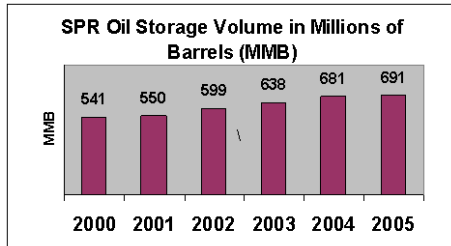


Exhibit 10: SPR Oil in Storage

The length of time required to market, sell, and deliver this oil to refiners was reduced from 15 to 13 days as of 2003 through enhanced efficiency. DynMcDermott’s capability of distributing oil to refiners ranges from 153% to 159% of the DOE requirement, and yet its operating cost per barrel of oil is lower than ever (Exhibit 11).

DynMcDermott’s three pillar approach has allowed it to manage the SPR to meet its customer’s primary need by providing a level of operational readiness that more than meets this requirement. Under DynMcDermott’s management, the SPR today stores more oil than at any time in its history (Exhibit 10).

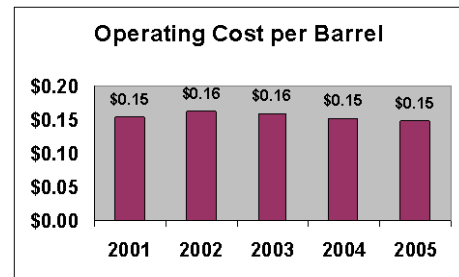


Exhibit 11: Operating Cost

DynMcDermott’s performance in meeting the DOE’s contractual requirements has also been enhanced by its strategic focus on the worker, the public and the environment. This is evident in three key contractual areas. First, DynMcDermott’s capability to provide its customer with solid cost guidance (termed “budget formulation”) is not only an indicator of contractual performance but also evidence of good communication between DynMcDermott and its customer – and solid management performance.

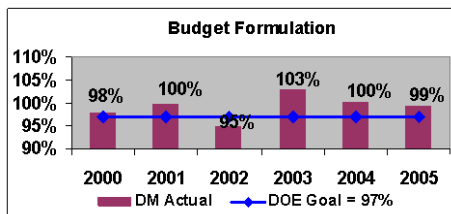


Exhibit 12: Budget Formulation Performance

Exhibit 12 shows DynMcDermott’s budget formulation results from 2000 through 2005. In only one year (2002) did DynMcDermott fail to meet or exceed the DOE’s target of 97 percent. The DOE has stated that DynMcDermott’s continuing improvement of business management practices reflect a corporate commitment to the kinds of management improvements necessary to continue successful growth.

By contract, the DOE has agreed to cover all actual costs incurred by DynMcDermott in its operation of the SPR. For this reason, budget variance – which reflects the accuracy of DynMcDermott’s planning – is the second important indicator of contractual performance to the DOE. Exhibit 13 shows DynMcDermott’s budget variance performance over the past five years, and

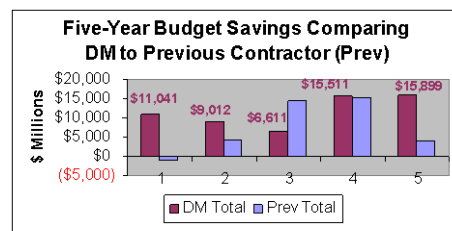


Exhibit 13: Budget Saving Comparisons

compares DynMcDermott’s performance with the previous SPR contractor. DynMcDermott has shown a more consistent and favorable variance. DynMcDermott’s three pillar approach has created an ability to emphasize cost reductions without sacrificing operational readiness or negatively impacting employees or the public. This allows DynMcDermott to consistently under run the budget while completing the assigned work and obtaining outstanding award fee scores. Comparing the previous contractor’s performance with DynMcDermott shows that DynMcDermott saved an additional \$21 million dollars over a comparable period of time.

Finally, DynMcDermott’s focus on the worker, the public, and the environment has allowed a culture of continuous quality improvement to take hold and flourish at the SPR. DynMcDermott’s performance in this area is evidenced by its ability to identify and correct minor quality discrepancies in less than one working day. Quickly addressing quality discrepancies is a leading indicator for overall quality management performance. DynMcDermott closes 75 percent of these minor discrepancies in the same day. Since DynMcDermott was certified under ISO 9001 in 2001, the firm has never had a major quality discrepancy.

DynMcDermott has continued to garner external validation of its excellent strategic and operational performance. Exhibit 14 provides a list of the awards and certifications

Year	Award or Certification
2000	Big Hill OSHA VPP Merit Certification
2000	White House "Closing the Circle" Certificate of Achievement: Pollution Prevention
2000	Texas General Land Office "Oil Spill Preparedness, Prevention and Response" Award
2000	West Hackberry OSHA VPP Star Certification
2000	ISO 14001 Certification
2001	EPA National Environmental Achievement Track Award
2001	ISO 9001 Certification
2001	Louisiana Quality Award
2001	Big Hill OSHA VPP Star Certification
2001	Bayou Choctaw OSHA VPP Star Certification
2001	Bryan Mound OSHA VPP Star Certification
2001	DOE Pollution Prevention Program SPR Vehicle Replacement Pilot Program
2001	Bryan Mound National Safety Council's "Perfect Record" Award
2001	Texas General Land Office "Environmental Excellence in Spill Preparedness, Prevention and Response"
2001	Big Hill National Safety Council's "Perfect Record" Award
2002	DOE Pollution Prevention Award for Waste
2002	Louisiana Quality Award for Environmental Management Systems
2002	White House "Closing the Circle" Certificate of Achievement: Pollution Prevention
2002	DOE Executive Safety Summit "Executive's Choice" Award
2002	OSHA Region VI Star of Excellence and Super Star Awards
2003	Louisiana Quality Award for Environmental Management Systems
2003	Louisiana Quality Award
2004	White House "Closing the Circle" Honorable Mention: Environmental Management Systems
2005	Louisiana Environmental Management System Award
2005	National Environmental Excellence Award, Best Environmental Technology, National Assoc. of Env. Pr
2005	Clean Texas - Clean World National Award
2005	Louisiana Department of Economic Development Lantern Award
2005	Big Hill Texas Quality Award
2005	The Malcolm Baldrige National Quality Award
2006	The Robert W. Campbell Award of the National Safety Council

Exhibit 14: DM Awards and Certifications, 2000 to 2006

DynMcDermott has attained since 2000, up to its reception of the Campbell Award. Included among these are the Malcolm Baldrige National Quality Award and the National Safety Council's prestigious Robert W. Campbell Award. The Campbell Award, which DynMcDermott received in 2006, aims to honor those businesses which demonstrate excellence through their integration of safety, health and environmental management into their business operating systems. Commenting on DynMcDermott's receipt of the Campbell Award, National Safety Council CEO Alan C. McMillan said, "It takes bold, innovative leaders like...DynMcDermott to demonstrate that business excellence begins with a steadfast commitment to safety, health and environment."

For his part, DynMcDermott's CEO Robert McGough is convinced that his company's focus on workers, the public, and the environment make DynMcDermott not only a good place to work and a good corporate citizen, but also a formidable competitor. "We want two things from our implementation of strategy," McGough recently said. "First, we want our customer to say, 'DynMcDermott is the best partner we've ever had at the SPR, and we can't imagine anyone else we'd rather partner with here.' Next, we want our competitors to look at us and say, 'No, thanks,' when the time comes – and it will – for the government to open up this contract (to competitive bidding)." McGough paused, then said, "You know, after the storms all but one of our people called in to let us know they were okay and ready to go back to work within a day. All but one. I think our people are the best, and I'd hate to be competing against them for this contract."⁵⁵

Appendix A: DynMcDermott Since the Award: Continuing the Campbell Journey

In September of 2008 DynMcDermott responded to natural disasters of Hurricanes Gustav and Ike, which caused 22 million dollars in damage and impact at the SPR. These storms also displaced the workforce from all four of the SPR storage facilities, as well as from corporate headquarters. As floodwaters receded from the two most severely impacted facilities, re-entry into snake- and alligator-infested facilities presented one of the most daunting challenges to maintaining personal safety that DynMcDermott has yet to face. Thanks to the sustained culture of integrated ES&H in all of DynMcDermott’s activities, not a single recordable injury occurred, despite many DynMcDermott employees at those facilities having lost their homes to hurricanes for the second time in 3 years.

Long-term sustainability is the ultimate challenge of an organization in today’s dynamic global environment. Since receiving the Robert W. Campbell Award in 2006, the spirit and dedication of its workforce has enabled DynMcDermott to adapt to continuous change and challenges, while maintaining a culture that supports high levels of performance even with limited resources.

Sustained and outstanding ES&H performance does not just happen. Every one of DynMcDermott’s employees understands and works hard at fulfilling their ES&H responsibilities. DynMcDermott management continuously evaluates, and when appropriate incorporates, ES&H innovations that continue to push the company beyond compliance. Over the life of DynMcDermott, ES&H performance (measured by recordable accidents, releases to the environment, and violations of permits) has continuously improved in stair step fashion (Exhibit 15). Improved performance, as illustrated by each reduced plateau of reportable incidents, was achieved by implementing the corresponding bulleted programs and activities indicated above each plateau in Figure 15, such as assigning Responsibility, Authority, and Accountability (RAA) at the point of work, rather than disseminating and distributing it elsewhere in the organization. Notably, this sustained improvement in performance occurred

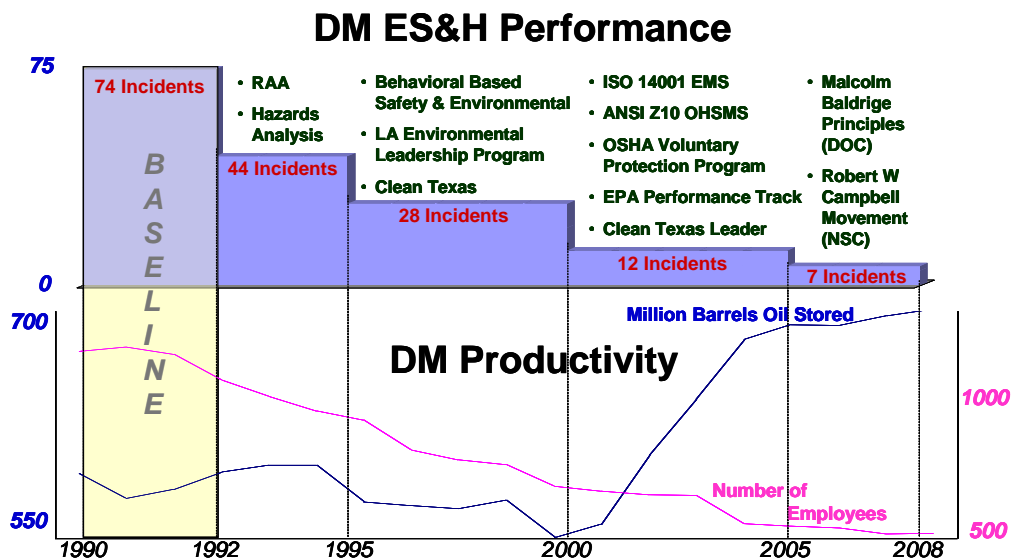
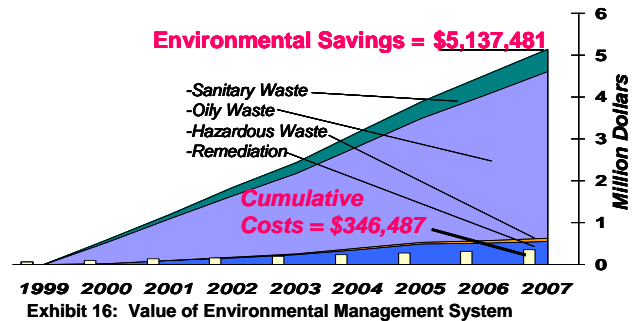


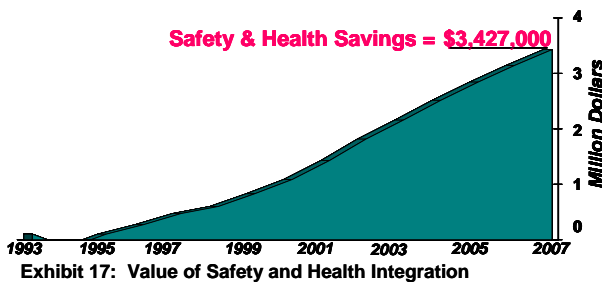
Exhibit 15: Performance Improvement (incident reduction), Coupled with Improvement Initiatives Compared to Increased Productivity

concurrently with increasing productivity (indicated by increasing crude oil inventory managed by fewer and fewer employees). Indeed, outstanding ES&H performance is a characteristic of, not (as some would argue) an impediment to, a well-managed and profitable organization.

But what of the costs of these programs and processes? In 2000 DynMcDermott implemented a third party, independently-validated Environmental Management System. Much of the benefit of that system was intangible in reorienting how the organization (and the individuals that make it up) viewed their roles and responsibilities for stewardship of their environment, as well as sustaining that orientation going forward. On the tangible side, DynMcDermott experienced measurable cost savings (and cost avoidances), including those accrued from reductions in waste generation from waste streams eliminated or reduced, and those accrued from reduced costs of cleanup and remediation by virtually eliminating uncontrolled releases of pollutants (Exhibit 16). Would these improvements have occurred without a robust Environmental Management System? DynMcDermott believes not. The discipline and clarity of purpose would not have existed throughout the company to systematically identify and execute the improvements necessary. As for the cost of the Environmental Management System, DynMcDermott built their system in house with their staff, carefully analyzing and enhancing existing integrated systems such that the cumulative incremental costs are but a fraction of the cumulative savings (Exhibit 16).



Since the early 1990's, DynMcDermott's approach to integration of safety and health has been one of inclusion of all of its employees into its processes, not just for the special knowledge that each possesses on how to do their job safely and effectively, but for the personal commitment each worker feels for his safety as well as the safety of his co-workers. As indicated in Exhibit 15, initiatives such as behavioral safety, the OSHA Voluntary Protection Program, and the Campbell movement have all contributed to the continuous improvement experienced in ES&H



performance, but it is the broad involvement of employees across the organization that have sustained this performance. As with the Environmental Management System, these initiatives have generated bottom line value through reduction in costs associated with reduction in injuries to DynMcDermott's workforce (Exhibit 17).

By the end of calendar year 2008, further development of organizational systems included the creation of Project Management and Human Performance Improvement systems, enhancements to training and development of the new hires (on-boarding), and a more disciplined approach to succession planning as commitments to continuing improvement.

The disciplined Project Management approach provides skills and capabilities to DynMcDermott employees that align with the Project Management Institute's Guide to Project Management Body of Knowledge. In its commitment to implement the Project Management Methodology (PMM), DynMcDermott recognized the need for and provided Project Management training to prepare individuals for qualification and certification as Project Management Professionals. The disciplined PMM benefits ES&H by its inclusion of ES&H considerations in projects at the conceptual stage and carrying through to completion and turnover for operation and maintenance.

Human Performance Improvement (HPI) is a program that significantly contributes to error reduction, accident prevention, and performance improvement. It is a program of reducing human errors and increasing workforce performance by identifying the error precursors and latent organizational weaknesses that provide an opportunity for workforce failure or accidents to occur. With DynMcDermott's commitment to ensuring a safe workplace for its employees and continuous improvement of its operations, it was only logical that DynMcDermott recognize the benefits of implementing HPI principles and tools for applications related not just to ES&H, but across the organization.

Newly hired employees always face a steep learning curve with respect to both technical knowledge base and organizational culture. DynMcDermott has expanded the scope of its new hire training to include an "On-Boarding" program. Every newly hired employee is invited to an on-boarding session taught by subject matter experts each month. These sessions provide an organization-wide view to the new hires, allowing them to rapidly gain expert information, first hand, in a learning environment. DynMcDermott's focus on ES&H, as well as knowledge in many other areas, is introduced to and reinforced with each new hire through the on-boarding program.

In order to build leadership bench strength and ensure leadership continuity, DynMcDermott implemented a formal system for succession planning and leadership development. The succession plan is based on a core set of leadership competencies, many of which are related to sustaining effective ES&H management, for Directors, Managers, and Supervisors. Emerging leaders for these levels are selected, developed and assessed against the identified core competencies, with individual development plans produced for each individual. The same approach is used to identify successors for critical non-management expert positions with important project knowledge and understanding. Retention of such knowledge, along with effective leadership, is essential to sustaining outstanding ES&H performance into the future.

DynMcDermott continues to strive to improve itself in an integrated and holistic manner that produces overall operational excellence. ES&H is a prominent component of the process, system, and methods that produce that excellence. The above initiatives are but examples of the process of continued honing of excellent performance. The outstanding and selfless performance of DynMcDermott's employees in response to Hurricanes Gustav and Ike 2008 are examples of the sorts of outcomes one expects from operationally excellent programs. DynMcDermott's client, the Department of Energy, recognized DynMcDermott's continuing excellent performance by awarding fully 100 percent of the available contract performance award fee to DynMcDermott for 2008.

¹ Wells, K. & Carns, A. (2005). Storms in the Gulf: Louisiana governor wants \$22.5 billion to prop up New Orleans. *Wall Street Journal* (Eastern ed.). New York: Sep 26. p. A.10

² Francis, T. (2005). Hurricane Katrina's toll. *Wall Street Journal* (Eastern ed.). New York: Aug 30. p. A.2

³ *Ibid.*

⁴ Farivar, M. (2005) Oil prices drop as supply, demand worries ease. *Wall Street Journal* (Eastern ed.). New York: Sep 8. p. C.4

⁵ Jones, D. (2005). Winner DynMcDermott's 'heroic performance' 'truly inspiring'. New York: *USA Today*. Nov. 25. p.2.B.

⁶ *Ibid.*

⁷ DynMcDermott Petroleum Operations Company, (2005). *Malcolm Baldrige National Quality Award Application*. New Orleans, LA: DynMcDermott Petroleum Operations Company. A drawdown is defined as the process of selling SPR oil in an emergency declared by the President of the United States, removing it from storage and distributing it to buyers.

⁸ *Ibid.*

⁹ US Fed News. (2005). Strategic Petroleum Reserve contractor to receive 2005 Malcolm Baldrige National Quality Award. Washington, DC: H.T. Media, Ltd.

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