Site Visit Report

Accreditation of Safety Programs Based on the Principles Of Behavior at Marathon Petroleum Company, LLC Illinois Refining Division

Commission on Behavioral Application
Cambridge Center for Behavioral Studies

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To: CCBS Commission on Behavioral Applications

From: Bill Hopkins and Dwight Harshbarger

Executive summary of site visit observations and recommendations

On August 29 – 30, we visited the Illinois Refining Division of Marathon Petroleum Company to review safety programs based on the principles of behavior and possible CCBS Accreditation.

A complete report of site visit observations follows this summary.

Recommendation to the CCBS Commission on Behavioral Applications

> The site visit team recommends that the Illinois Refining Division (IRD) of Marathon Petroleum Company (MPC) be accredited for their overall exemplary safety program with a Principles of Behavior Based Safety program as a core component. This accreditation will be for a period of three (3) years, September, 2005 through September, 2008.

Conditions of recommendation:

1. IRD will further revise the application to describe all components of the safety program in sufficient detail that a knowledgeable and experienced safety person could repeat the program. (The site visitors have shared with Kathleen Isom their suggestions for further additions to and revisions of the application and believe that all parties understand the further revisions needed. Although not a condition of the recommendation for accreditation, for a number of practical reasons, the site visitors will appreciate Ms Isom's finishing her revisions by Friday, September 9, 2005.)

2. The staff of IRD will continue mining their data in search for evidence of the effectiveness of the safety program. Several possibilities for this mining were agreed to in discussions on 8/29. We encourage IRD staff to go beyond that discussion and look for other ways in which safety performance data can speak to the effectiveness of the safety program.

3. IRD will update the data that become a part of the application every six months to allow interested parties to examine the course of the IRD safety performance after accreditation is awarded.

4. IRD acknowledges that Cambridge Center accreditation of its safety program recognizes the high quality of its safety performance, but does not guarantee IRD's future safe performance.

A. Strengths of the Program:

1. Most importantly, the program is effective. Lines of evidence that attest to this effectiveness include:

   - the progressive and sustained improvement in both the OSHA-Recordable rate and lost-time rate

   - the sustained improvement in the IRD lost-time rate relative to BLS and NPRA improvements in relation to MPC lost-time rate improvements (The latter comparison will be examined by IRD staff.)

   - the sustained improvement in the IRD OSHA-Recordable Rate relative to BLS and NPRA improvements and in relation to MPC OSHA-Recordable improvements. (These comparisons will be examined by IRD staff.)

   - the progressive increase in the number of behavior observations conducted and the number of people observed at IRD

2. The safety processes described in the application are occurring in the refinery.

3. The PBBS program is effectively integrated with the other safety programs.

4. The entire safety program appears to function smoothly.

5. There are systematic and effective methods for managing information and data relevant to the safety program.

6. The program's leadership and management is effective, especially in identifying opportunities to improve the overall safety program, in developing straightforward methods for addressing those opportunities, and in executing those methods.

7. There is good evidence of consistent and visible management support for safety.

8. There is strong evidence of support for the program among first-line employees.

9. The steering committee is active, committed, focused, and innovative in guiding and improving the program.

10. There are a number of converging lines of evidence (leading and lagging indicators) that point to the accuracy of the safety data.

B. Recommendations

1. Keeping Safety Evergreen and Getting Below Zero

IRD has a superb record of over three and a half years with no lost-time injuries and several months with no OSHA Recordables. These are the circumstances that cause people to become complacent with resulting harm, and can be viewed as an emergency condition. In safety, as in so many human endeavors, there is no such thing as maintaining the status quo. There is only moving ahead or falling back.

- The leaders of safety at IRD need to take steps to ensure that the record of safety accomplishment continues to grow. There are two major opportunities we see as especially important and within IRD's grasp, as well as a number of additional opportunities for improvements. In the Executive Summary following this report, we describe a general model on which all efforts at improving behavior can be built and applied to the recommendations, below.

2. Develop Stronger Mid-Management Involvement

Managers, supervisors, foremen, and lead employees at IRD should be trained in and apply the methods of the PBBS program. This would include:

- Applying behavioral methods in supporting safety
  - Functioning as facilitators
  - Functioning as observers
  - Participating in any other specific activities that will support safety and help them learn the use of the methods of the program.

- Applying behavioral methods in all aspects of their work. As managers become skillful in using these methods in support of safety, it is an easy step for them to begin using the methods to support whatever needs to be done in their areas of responsibility and influence. A possible example might be in support of a refinery-wide initiative to speed the bringing of operations problems to the attention of management, resulting in their being addressed earlier and reducing the risk that they become serious and / or entrenched in ways of operating.

  An analysis of the behaviors managers might need to support this initiative might include (this is surely not exhaustive, perhaps not even correct, just illustrative) increases in the frequency of:
  - workers bringing to their foreman's attention some operational problem
  - workers attending meetings aimed at solving operations problems
  - workers suggesting possible solutions to the problems
  - workers considering other workers' suggestions without criticizing (punishing).

  All of the behaviors can be observed and counted. Once initiated, the behaviors will need to be consistently and systematically reinforced. Successfully doing this will give IRD a capability that will allow it to improve its operations along many different dimensions.

As managers focus on a particular dimension of refinery operations, it will be useful to measure and track the targeted operations. The data can then be used to manage the initiative and to serve as a basis for appropriate celebrations.

In addition, building leading indicators (behavioral) safety data into the scorecards of managers will help them become more thoroughly involved in safety.

3. Improve Contractor Safety

The interest in improving contractor safety at IRD is partly self-interest but it is much more than that. It is primarily humanitarian. People at IRD believe they can help and want to help because it will benefit the contract employees.

If IRD treats contractor safety exactly as it has safety among its own people, it will be successful.

- What behaviors does IRD want from contractors and contract employees?
- How can these behaviors be observed and measured?
- How can IRD get these behaviors started?
- How can these behaviors be reinforced?
- How can unwanted behaviors be corrected?

Again, contractor safety should be monitored and publicized as a means of managing the contractor safety initiative, and as a basis for staging celebrations when wanted behaviors and milestones are accomplished. This monitoring could focus on such as:

- Number of observations of contract employee behaviors
- Number of contract employees observed
- Percent of observed behaviors that are safe
- Number of reported near misses (remember, you want this to increase)
- Number of instances in which safe behaviors are reinforced
- Number of hazardous conditions for which action is requested
- Distribution of resolution times for reported hazards

Further monitoring could be used to gauge the effectiveness of the initiative. This could include:

- First aid-treated case rate
- OSHA Recordable rate
- Lost-time rate

4. Use the existing leading indicator safety data more aggressively in feedback and reinforcement for the employees. There are many ways this can be done:
    - feedback boards for specific departments or work groups that might display graphs of performance over time for such accomplishments as:
        - number of observations for that department
        - number of people observed
        - number of hazardous conditions reported

        - number of reported hazards resolved within a certain time
        - number of near misses reported
        - number of people serving as facilitators
    - using these graphs and current data as a point of discussion in tool box safety meetings
    - posting the graphs in break rooms and other places that will insure their high visibility.

5. Use the data and graphs mentioned above in additional ways:
    - as a basis for discussions in tool box safety meetings (without identifying an individual worker whose behavior is being discussed)
    - as a basis for recommendations for special recognition as when someone goes out of their way to protect another worker.

6. An obvious disconnect in safety training needs to be addressed. A small number of people sampled in the training tracking system are not recorded as having scheduled and / or completed training. There are many possible sources for this problem and finding the exact cause was beyond the purpose of the site visit. Safety staff and management can surely solve this problem but it should be addressed quickly.

7. Apply the safety program to all areas of the refinery. The site visit concentrated on the refinery operations and maintenance; areas of past injuries and continuing attention. However, office and computer jobs should not be ignored. Computer work is coming under increasing scrutiny due to the rising number of cumulative trauma disorders, such as carpal tunnel syndrome, epicondylitis, and lower back problems may not show up for long periods of time yet be debilitating and incur human and financial costs. Behavioral safety programs can be used effectively in these jobs.

8. The safety program at IRD is exemplary. IRD's commitment to extending the program to contract employees is laudable. Similarly, IRD safety program managers can help employees extend behavioral safety methods into their homes, communities, and schools, as well as other parts of Marathon Petroleum Company.

The Site Visit Report

A. Identifying information:

Name of the organization: Marathon Petroleum Company, LLC/ Illinois Refining Division

Dates of the site visit: August 29 – 30, 2005

Site visitors: Dr. Bill Hopkins, Dr. Dwight Harshbarger, Cambridge Center for Behavioral Studies

Location of corporate office: Findlay, Ohio

Name of company representatives in charge of the application: Kathleen Isom and Tim Meier

Phone number(s) of the company representative: 618-544-2121

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B. Background

The divisions of the company involved in the PBBS program: Illinois Refining Division

Geographic locations: Robinson, Illinois

Good/services provided at each site: Petroleum refining, i.e., gasoline, diesel, etc.

Kinds of jobs in which worker are involved: Petroleum manufacturing operations, maintenance of operations, laboratory operations, technical operations support, clerical and management functions.

Recent non-safety initiatives and company changes:
2005 – Marathon bought Ashland. As of September 1, 2005, the company is named Marathon Petroleum Company, LLC (MPC).

2005 – Operations shift change from 8 hour shifts to 12 hour shifts.

2005 – Class-room ethics training for all employees

Recent non-PBBS safety initiatives:

2004 - Extensive Fall Protection safety procedure developed and class-room training held for applicable employees

2004 - Heat Stress Prevention Best Practice developed and implemented

2004 - Approximately $7.5 million was dedicated to safety equipment upgrades, fire system upgrades, the purchase of new safety equipment and security improvements.

2002 - OSHA VPP Star re-certification; Initial certification in 1999

2001 - STEPS (Systems to Ensure Participation in Safety) implemented, a structured safety program emphasizing direct involvement and accountability of every employee, at every level of the organization. Contractors are also included in the STEPS safety meetings; see additional information regarding STEPS under General Safety Methods, below.

General Safety Methods:

Dates in parentheses indicate when the particular safety methods were begun.

- STEPS (Systems To Ensure Participation in Safety) (2001) – The STEPS process has become an essential part of the overall safety program to reduce, and ultimately eliminate, injuries at the refinery. The process was implemented with the following Safety Mission Statement signed by the Division Manager, "*We will conduct all of our work in a manner that protects all employees and our community, while establishing a culture which values safety equally with the other aspects of our business."*

  The STEPS process was implemented after STEPS training was conducted by a recognized safety consultant for all employees and lead contractor representatives. STEPS is a structured safety program emphasizing direct involvement and accountability of every employee, at every level of the organization. STEPS was tailored to meet the needs at the refinery and strengthen existing safety processes. A few key points from the STEPS process are explained below:

  - All levels of management manage, lead and champion the STEPS process throughout his or her area of responsibility in order to achieve an accident-free work environment. A matrix has been designed for each level of management to track their responsibilities.

  - Each employee and lead contractor representative is trained, learning his or her specific safety responsibilities, such as area inspection and 'What-If' drill frequencies. (See Appendix A for Area Inspection form and Appendix B, 'What-If' Drill form). Each employee is held accountable for the quality execution of these assigned responsibilities.

  - Sequential structures of safety meetings are implemented (i.e., Department, Area, Work Group). Every employee and routine contractor in the refinery participates in these safety meetings and is held accountable for participation by the Division Manager, who audits the program monthly. (See Appendix C for an example of a STEPS meeting agenda.)

  - In addition to sequential safety meetings, the STEPS program tracks the completion of the following:

    - SHORT (Surveying to Help Observe Risk Today) shot observations (See

Appendix D for SHORT shot observation form and described in Section G),
- ACTS (Areas Communicating Trust in Safety) BBS (Behavioral Based Safety) observation videos (See Appendix E for ACTS BBS video observation form and description in Section G),
- Area inspections,
- Job hazard analysis (JHA) reviews (See Appendix F for JHA form),
- What-if drills, posing and assessing responses to hypothetical safety risk situations,
- Individual tool-box meetings, which are a brief discussion regarding a safety topic by a supervior with his or her subordinates,
- Annual safety performance reviews (See Appendix G for the Annual safety performance review forms for both supervisory and non-supervisory personnel.).

This tracking is completed by all levels of supervision. Each supervisor has a custom-designed matrix to record the required safety activities performed in their areas.

- Maintenance of safe work conditions through engineering controls, inspections, etc., is structured and stringently audited for completion.

- All Work Groups are audited annually to evaluate compliance with the STEPS process. (See Appendix for example of a STEPS Safety Process Audit form)

- Responsible Care® (2000) - The "National Petrochemical and Refiners Association's" (NPRA) Responsible Care® initiative is one of the frameworks that Marathon Petroleum Company (MPC) uses to demonstrate its commitment to the public and employees. All members have a common vision of no accidents, no injuries and no harm to the environment. MPC was among the first companies in the petroleum industry to sign up for this volunteer initiative, which focuses on improvement through implementation of key environmental, health, and safety procedures, called the "Codes of Management Practices."

  Responsible Care emphasizes the following:
  - Community Awareness & Emergency Response
  - Pollution Prevention
  - Process Safety
  - Distribution
  - Employee Health & Safety
  - Product Stewardship
  - Security

In 2004, The Illinois Refining Division (IRD) was a finalist for the MPC President's Award for Responsible Care®. This award is given to recognize exemplary implementation of the Responsible Care® program within the company. This marked the fourth consecutive year that IRD had achieved this distinction, a record unmatched within MPC. As a finalist, IRD received a $2,500 community outreach grant from the Marathon Oil Corporation Foundation to be donated to a qualifying local non-profit organization(s) chosen by employees.

NPRA recognized IRD with the presentation of four awards at the annual National Environmental and Safety Conference in 2005 including:

- Gold Award – given to those facilities which have achieved a 25% or greater reduction in the total OSHA recordable incidence rate, as compared to the average total recordable incidence rates of the three previous calendar years. The Illinois Refining Division's (IRD's) reduction was 48.2%.

- Meritorious Safety Performance Award – recognizes facilities which have achieved a total OSHA recordable incidence rate of 1.2 or less for a calendar year. IRD's OSHA Recordable rate was 0.87 in 2004.

- Award for Safety Achievement (Hours) – acknowledges facilities for operation one million or more man-hours without a lost-time injury. IRD worked 1,377,086 hours during 2004. As of March 31, 2005 IRD has achieved over 4 ½ million manhours without a lost-time injury.

- Award for Safety Achievement (Years) – acknowledges facilities for operating one or more years without a lost-time injury. As of March 31, 2005, IRD has achieved 1218 days without a lost-time injury.

- Safety Training

Safety training programs and data systems were sampled and reviewed during the site visit, and are operating as described in the application.

Safety training includes the following topics:

- Portable Fire Extinguishers
- Emergency Response Awareness
- Anhydrous Ammonia Awareness
- Benzene Awareness
- Hearing Conservation
- PPE Awareness
- Self-Contained Breathing Apparatus (SCBA) hands on
- Asbestos Awareness
- Industrial Ergonomics
- Respirators
- Confined Space Entry
- HF Acid Orientation and HF Acid First-Aid
- Work Clearance Permits
- Hazards of Nitrogen
- Voluntary Protection Program (VPP)
- Responsible Care® Awareness
- Environmental Awareness
- Electrical Safety Non-Electrical Worker
- Hazwoper
- Awareness Level
- Access to Medical Records

- Hazard Communication

Methods for delivering training were reviewed during the site visit, and are operating as described in the accreditation application.

All hourly, management and support personnel who work in the refinery receive training, at a minimum, as required by the OSHA standards. A Training Matrix has been developed to identify the safety training requirements for each job description. For example, training includes topics such as Respiratory Protection, Hazard Communication, Hearing Conservation, Emergency Response Awareness, Asbestos, Confined Space Entry, and Benzene. Most of this training is conducted through computer-based training modules, with the exception of training that requires hands-on instruction, such as for Self-Contained Breathing Apparatus and Fire Extinguishers.

The Training Department manages the documentation of mandatory safety training by utilizing the VTA "Virtual Training Assistant". Each employee's progress can be monitored by the individual and by his or her Supervisors. A reminder notification is sent via e-mail to the individual within thirty days of the required completion date. Monthly status updates of completed training for all areas are presented during the STEPS sequential safety meetings.

The IRD training programs utilizes classroom, hands-on, and computer based training to meet the requirements set by OSHA standards. Web delivery ensures that trainees receive training in a timely manner and complete in at a self-paced rate. To insure that the necessary individuals have received information, an electronic tracking program, "OTIS", records the training progress of individuals. Due dates are established at one, two, and three year intervals with a separate grouping for one time courses. All regulated safety training is verified as complete each December 31.

The Operator Training manual provides instruction to assist operators in the safe and efficient performance of tasks, and to provide them with a sequential learning path preparing them for their respective unit operator progression. The manual was developed through the efforts of process specialists and unit training coordinators, with the assistance of the training department. Safety and organizational training remains a priority and are completed prior to allowing employees in the field.

The Craftsman Training and Qualifications manual outlines a learning curriculum for new employees in the Maintenance Department. The manual also provides a personalized training plan for the following craft progressions: General Maintenance Craftsmen, Electricians, HVAC Technicians, Instrument Technician, Mobile Equipment Operators, Mechanics and Welders.

The site visitors reviewed the system for maintaining training records; we recommend that the system for tracking and monitoring completion of training modules be reviewed, tested and upgraded as needed to achieve reliable operation.

Safety records

A variety of safety records are kept throughout the Illinois Refining Division (IRD). The following records were sampled and reviewed during the site visit, and accurately reflect safety performance.

- Injury/Illness Records

All employees have access to an electronic database to input first-aid reports. OSHA forms are completed if the severity of the injury is beyond a first-aid. The Safety Department initiates the OSHA forms and tracks them to completion. Near miss and incidents/injuries (other than first-aid injuries) are input into an Incident Report database. These reports are discussed each morning at the daily Refinery Management Team (RMT) Staff meetings. Using a Safety Standard Operating Procedure for Incident Investigations, the incident/injury is designated by the RMT by category and follow-up action.

  - Injury/Illness records are recorded by body part and type of injury and tracked monthly, quarterly, and annually; they are reviewed in the monthly STEPS safety meetings.

  - BBS Top Eight At-Risk Behaviors are tracked monthly, quarterly and annually. They are reviewed in the monthly STEPS safety meetings.

  - Knowledge Management System (KMS) Incident Reports are completed per the PSM. Standard (see Appendix I for Incident Report form).

  - Safety Opportunities Shared (SOS) near miss reports are published in the weekly refinery newsletter, The Mainstream (see Appendix J for SOS form).

- Exposure Assessment Records
  Exposures to benzene, noise, welding fumes, asbestos and lead are kept as exposure assessment records.

- Job Hazard Analysis
  Each area develops JHA's with emphasis on potentially high risk jobs. JHA's are reviewed as scheduled for each work group, and routinely updated. JHA's are scheduled and conducted as outlined in each supervisor's STEPS matrix.

- Annual Safety Performance Reviews
  These forms are conducted with the end-of-year performance review, to rate the employee's safety performance during the year.

- 180 Degree Feedback Review
  This form is conducted anonymously and is a semi-annual review of all supervision. Part of the form is to gage the safety performance of the supervisor. Feedback is given to the supervisor.

- Area Inspections
  Each area completes safety inspections monthly, and for the entire refinery quarterly. The inspections review housekeeping items, proper storage of chemicals, labeling, etc. The results are reviewed by the respective department foremen and any deficiencies are corrected.

- Fixed and Portable Safety Equipment Inspections
  Inspections are conducted by departments as required, i.e., weekly, monthly, etc., for equipment such as safety showers, fire extinguisher and first-aid kits. The Safety Department

audits these inspections quarterly to ensure they are being conducted. Results are discussed with the respective department and then sent to the Safety Supervisor.

- Process and Maintenance Shop Audits
  Annual audits of the entire facility are conducted by the Safety Department. They include electrical compliance, exit and egress, labeling, etc. Results are discussed with the respective department, and then sent to the Safety Supervisor for review. Any deficiencies are corrected.

- OSHA Regulatory Compliance Audits
  Audits, developed per OSHA standards, are conducted by the Safety Department at least annually for topics such as benzene, confined space entry and lockout/tagout. Any deficiencies are corrected and the results are reviewed by the Safety Supervisor.

- Contractor Field Audits
  Audits are conducted by the Safety Department, any deficiencies are corrected and the audit results are sent to the Safety Supervisor. Twelve field audits are conducted each quarter and cover topics such as confined space entry, excavation, and fall protection.

- Contractor Compliance Audits
  Four contractors are randomly chosen annually for a comprehensive audit by the Safety Department. This audit spot checks safety programs such as safety procedures required by the contractor, training conducted by the contractor, records of safety meetings, etc. Any deficiencies are corrected by the contractor, and the audits are reviewed by the Safety Supervisor.

- STEPS Matrix Audits
  These audits are conducted by each level of Management and the Safety Department for the completion of safety programs such as:
  - Required safety meetings,
  - JHA reviews,
  - Area inspections, and
  - Tool-box meetings.

  Each level of Management reviews the matrices of their subordinates on periodic intervals. Then the Safety Department audits these matrices quarterly, reviewing all levels of management annually.

C. Descriptions of IRD workers:

1. Ages: Median age is 46; range of ages is 21 – 63.

2. Experience: Median years of experience is 19 years; range of experience is 0 - 38 years.

3. Training: Operators receive approximately 480 hours each of technical training and on-the-job training. Maintenance personnel receive approximately 80 hours of technical training, and various

amounts of on-the-job training depending on the job title. Annual refresher training is delivered on selected health, safety and environment topics for all refinery employees.

4. Education: All operators and maintenance employees have a minimum of a high school diploma, with several having college degrees. Employees such as safety professionals and engineers have a minimum of a four-year college degree.

5. Health: A company wellness program is available to employees; health care insurance is available to eligible employees. A full-time nurse is on staff and available during the day shift. Employees trained in first-aid are available during evening hours and weekends. An on-site rescue team is always available for emergencies.

6. Contractors: The refinery hires an average of 200 contractors a day during normal working operations to complete a variety of job tasks. These tasks include concrete and foundation work, pipefitting, insulation removal and installation, and storage tank cleaning. Each contractor is responsible for insuring that each of their employees is educated for their specific task prior to working in the refinery. Contractors must follow all OSHA regulations, as well as IRD safety procedures. An independent third-party contract firm reviews contractor safety programs before they will be hired by IRD. The safety data of contractors is monitored by IRD. However, these data are not included herein in the data reported for IRD.

The safety performance of contractors is highlighted as a concern in the site visit recommendations.

D. Safety concerns:

In 1995, the total OSHA recordable rate was 3.63 for refinery employees. This rate was unacceptable. The Division Manager set a goal in 1996 to implement an hourly-employee-run principles of behavioral-based (PBBS) safety team. The trust and communication between management and the hourly workforce was generally viewed to be low. The new team was formed in 1996, implemented the program in 1997, and called themselves the ACTS (Areas Communicating Trust in Safety) Team.

E. The PBBS data

The data described below were reviewed during the site visit; the data are accurate and systematically updated in IRD's data management system.

- Injury/Illness Records - All employees have access to an electronic database to input first-aid reports. These reports are followed-up by the Company Nurse and by the Safety Department. Also, OSHA forms are completed if the severity of the injury is beyond a first-aid. The Safety Department initiates the OSHA forms and tracks them to completion. Injury/Illness records are trended by body part and type of injury. They are tracked monthly, quarterly and annually, being reviewed in the monthly STEPS safety meetings.

- PBBS Data – PBBS data are collected by 250 trained observers performing peer-to-peer job observations. These data include safe behavior as well as at-risk behavior, and the barriers that drive these actions. The data are entered into an in-house-developed database that has several trending options. Safe behaviors are reinforced (for example by approving comments by the observer), and at-risk behaviors are addressed at the time of the observation (for example by constructive feedback by the observer). Safety concerns are addressed through a follow-up system designed in the program and administrated by the ACTS Coordinator.

- Incident Reports – The reports include all incidents (other than first-aid injuries) from near misses to a lost time injury. They are recorded initially in the Knowledge Management System (KMS) and are discussed each morning at the daily Refinery Management Team (RMT) Staff meetings. Using the Safety Standard Operating Procedure for Incident Investigations, the incident/injury is designated by the RMT by category and follow-up action is assigned according to procedure.

- Safety Opportunities Shared (SOS) reports – These near miss reports are submitted by employee using the Safety Opportunities Shared form. The forms are sent through channels as indicated by flow chart in Appendix. The near miss reports are then published in the weekly refinery newsletter, *The Mainstream*.

1. Comments on the data

All safety data are subjected to a trend analysis, with the objective of using the data to eliminate injuries. Trends in lagging indicators, such as the overall OSHA recordable rates and lost time rates, indicate that the BBS program is having a positive impact on safety performance at IRD (See graphs in Section H). Leading indicators, the behavioral safety data, plus near miss and injury data, are reviewed in detail monthly, quarterly and annually during the STEPS safety meetings. Peaks in data indicating an increase in the number of injuries for a particular body part or type of injury are highlighted, discussed, and acted on.

The at-risk behaviors observed during SHORT Shots are principal leading indicators of potential problems at the refinery. The top eight at-risk behaviors are reviewed in detail during monthly STEPS safety meetings. This review heightens awareness of these behaviors and drives the ACTS committee to develop new programs to attack these trouble areas. The results are used to implement safety awareness activities through STEPS safety meeting topics, toolbox topics, and newsletter articles.

In addition to reviews during safety meetings, special teams have been formed to focus on the type of injury or body part affected in efforts to reduce the injuries. For example, an eye protection focus group was formed to review the types of safety glasses IRD provides. Glove choices were modified with input from employees. This team developed a poster to educate employees and contractors the type of glove best suited for specific jobs and management enforced the new glove usage. Finally, a plant-wide stretching program was instituted in 2005 to reduce sprains and strains.

2. Accuracy of the data

The Safety Supervisor determines injury classification, with assistance from MPC Corporate Safety as needed. OSHA reviewed IRD's injury data during VPP on-site evaluations in both 1999 and 2002, with no changes requested. In addition, MPC Corporate E&S Auditing conducts a comprehensive audit every three years, which includes a review of injury data. Finally, MPC hires an independent third party to conduct comprehensive E&S audits every three years at IRD, which includes a review of injury data.

BBS data are monitored for consistency by the ACTS Coordinator. Additional BBS Awareness training was conducted for all observers in 2004 to assist in consistent interpretations of at-risk and safe behaviors. Observers are given refresher training tri-annually which includes hazard recognition, correct completion of observation forms and other similar activities and techniques.

F. Description of the PBBS program

ACTS is the refinery's core PBBS program. It was reviewed during the site visit, and is operating as described.

The following are brief explanations the ACTS primary initiatives:

- SHORT Shot Observations - A field safety survey of an on-going task that are designed to increase hazard recognition skills and raise awareness (see Appendix D).

- ACTS observation video - A planned taping of a job or task that provides reinforcement of safe behaviors or work practices. It can be used to evaluate task for at risk and safe procedures, behaviors or work practices (see Appendix E).

- ACTS Safety Action Process (ASAP) - A form used when appropriate avenues of communication have been exhausted, and the originating employee or group is not satisfied with the resolution. The completion of this form alerts management to focus on an identified hazard/problem.

- Safety Opportunities Shared (SOS) - This form informs others of an incident or occurrence that could have resulted in an accident or injury by communicating the near-miss. After making the SOS anonymous, the incident is communicated thru the weekly refinery newsletter, *The Mainstream*, and is evaluated during HAZOP reviews (see Appendix J).

- Weekly *Mainstream* Articles - A short article or story used to try to influence the reader to behave safely.

- ACTS presentation for the STEPS safety meeting - A presentation given each month to inform and influence the behaviors of the workers in a group. ASAP up-dates and at-risk behaviors from the previous month's observations are included (see Appendix C).

- ACTS Tool-Box Meetings at the Gates - A brief peer-to-peer awareness discussion conducted at the main gates and office doors. Often these talks are accompanied by the handing out of inexpensive topic related incentives.

G. Chronology of the PBBS Program as reported by IRD

Current operations, as described in this section, below, were reviewed during the site visit and are operating as described.

Pre-1996:

Before 1996, the safety process was management driven. The Illinois Refining Division (IRD) had a goal of zero lost time injuries. There was very little hourly employee involvement. Compared to the industry standards, IRD was generally performing better than average, but the OSHA recordable rate was still unacceptable. Several different safety programs were used to increase employee involvement. Due to lack of communication and trust, the programs failed. In 1995 IRD had a change in Division Management.

1996-1999:

The new Division Manager, concerned about the OSHA recordable rate, created a safety team of hourly employees and safety representatives to develop a Behavior-Based Safety (BBS) program. An outside BBS vendor was hired to help set up a program at the refinery. The employees chosen to start the BBS program decided that the vendor's program was too structured for the refinery and took action to design and build a BBS program. They named the program ACTS (Areas Communicating Trust in Safety), with the mission statement, "*To develop and implement, by hourly employees, a process to promote a safer working environment for individual areas."* Management allowed the committee developmental freedom and protection from disciplinary actions by their direct supervisors, and ACTS had the challenge of promoting the evolving BBS program to their peers.

The first program rolled out was the ASAP (ACTS Safety Action Process). The program is operational today. If an employee brings up a safety concern to their supervisor which goes unanswered, then they can use this process to obtain an answer. ASAP guarantees communication of safety concerns through the proper chain of command, with responses assured to the originator. No repercussions follow the use of this form. Trust followed the program's development.

A second program rolled out was the BBS Video Observation Program. These videos were filmed and viewed by the individual work group, where the at-risk and safe behaviors were pointed out and discussed. The tapes were then erased after the work group was finished viewing it. Again, no repercussions were seen by employees, and the lines of communication were opened further. Trust in the process continued to build, and ACTS continued to grow. Hourly employees were elected or appointed from each area or complex, and were trained to conduct safety meetings and promote the BBS process. The facilitators conducted monthly safety meetings with their individual work groups. As the success of the process grew, other programs developed. SOS (Safety Opportunities Shared) was started. This form was a way to anonymously publish near misses in the refinery's weekly newsletter, *The Mainstream*.

The injury rate decreased, and IRD set a goal to apply for OSHA VPP Star status in 1997, achieving it in 1999. Part of the VPP accreditation process included more formalized programs for JHA's, area inspections and tool-box meetings. Also, a peer-to-peer observation program was implemented. The ACTS team was asked to develop and facilitate these programs at that time. Area Inspection forms

were designed and inspections conducted. Tool-box meetings were conducted on-shift for Operations employees, and Maintenance started conducting tool box meeting every workday morning. An observation program was started with about twenty SHORT (Surveying to Help Observe Risk Today) Shot observers trained to perform peer-to-peer observations. In 1999, the first full-time ACTS Coordinator position was developed and has continued with annual terms. The ACTS Coordinator reports to the Safety Supervisor.

2000-2004:

In 2000, the need for management's involvement to support and enforce these added safety programs was recognized. In 2000, management appointed a cross-sectional committee of nine employees both salaried and hourly to address a recommendation from the OSHA VPP accreditation process, to develop a program to organize all of the IRD safety efforts.

In 2001, STEPS was implemented. STEPS included every employee from the Division Manager to Operators and Clerical Staff. ACTS became a segment of STEPS. This change allowed ACTS to focus on its main goal—Behavior Based Safety. The philosophy of ACTS evolved to, "You have the Right and the Responsibility to go home uninjured."

To accomplish this mission, ACTS utilized all of its safety programs and activities as tools. These activities included developing and conducting a safety topic presentation at monthly STEPS safety meetings. ACTS representatives deliver the BBS portion of the STEPS safety meeting all employees, from the Division Manager's meeting to the hourly Work Group meetings on a monthly basis, with the Office employees meeting quarterly. The result is that ACTS team members directly interact with management and hourly employees on a regular basis, to educate and challenge them about BBS topics and data.

Other ACTS safety programs and activities include near miss recording and publishing, peer to peer observations, observation videos, BBS tool-box talks at the gates into the refinery for employees and contractors coming to work, writing articles for *The Mainstream* regarding BBS topics, tracking and analyzing observation data for trends, and tracking ASAP forms.

In 2000, the first full time ACTS Coordinator was elected from the Steering Committee. A major role of the ACTS Coordinator is to train facilitators to present the monthly/quarterly STEPS BBS safety topics. The facilitators bring employee feedback from these meetings to the ACTS Steering Committee members or ACTS coordinator for discussion. Other responsibilities of the ACTS Coordinator include organizing the agendas for monthly meetings with the Steering Committee and quarterly meetings with both the Steering Committee and the facilitators.

In 2004 the ACTS team conducted refresher training for every employee involved in the ACTS process. This training benchmarked BBS concepts and goals; refresher training is now conducted every three years. In 2004, the ACTS team also trained contractor safety representatives, all maintenance employees, and all IRD leadership on BBS awareness training.

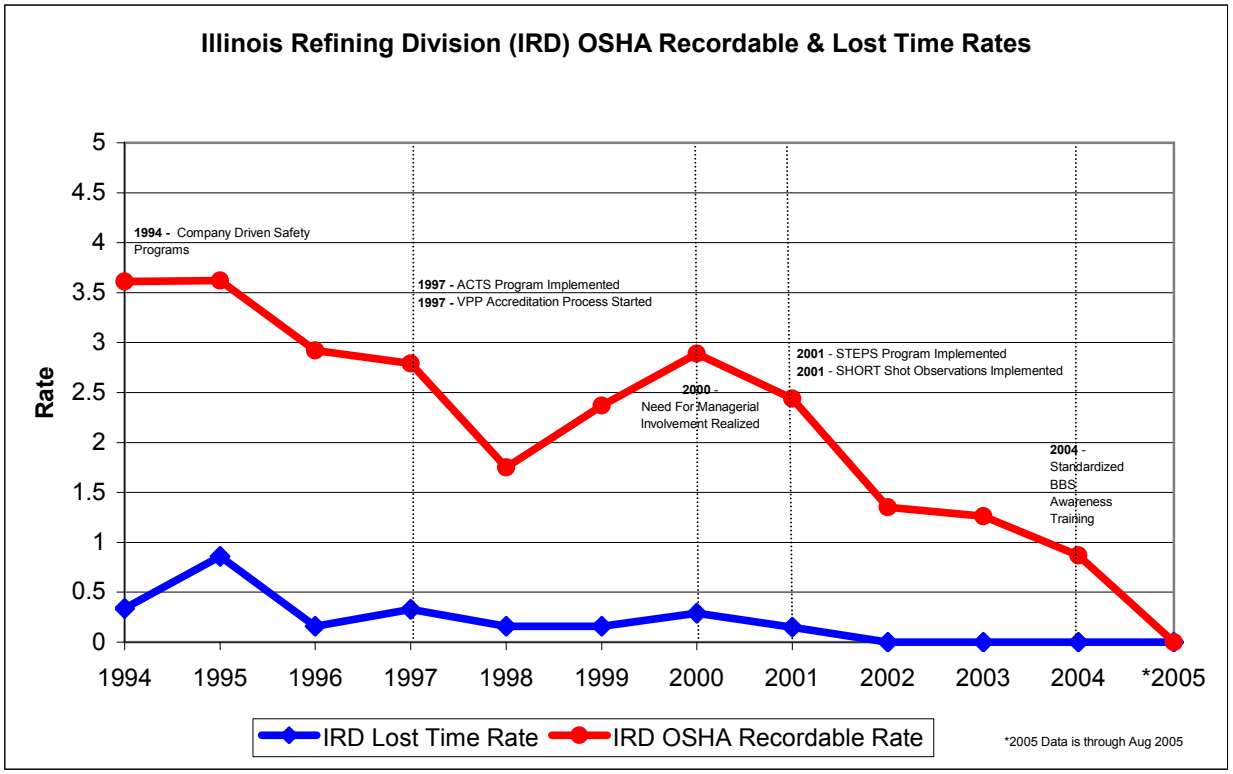
2005:

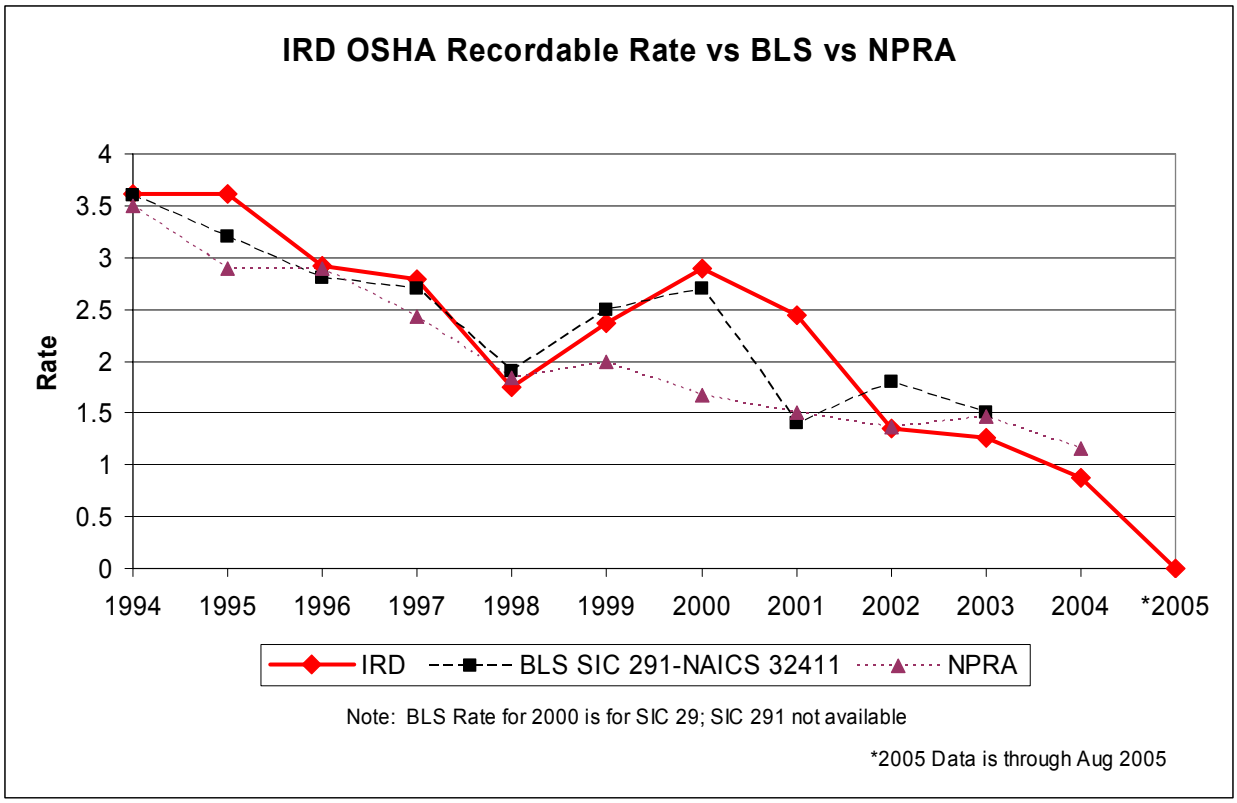
IRD implemented a new 12 hour shift schedule for operations, products control operators, and some laboratory workers. With this new schedule, ACTS increased the number of facilitators trained so

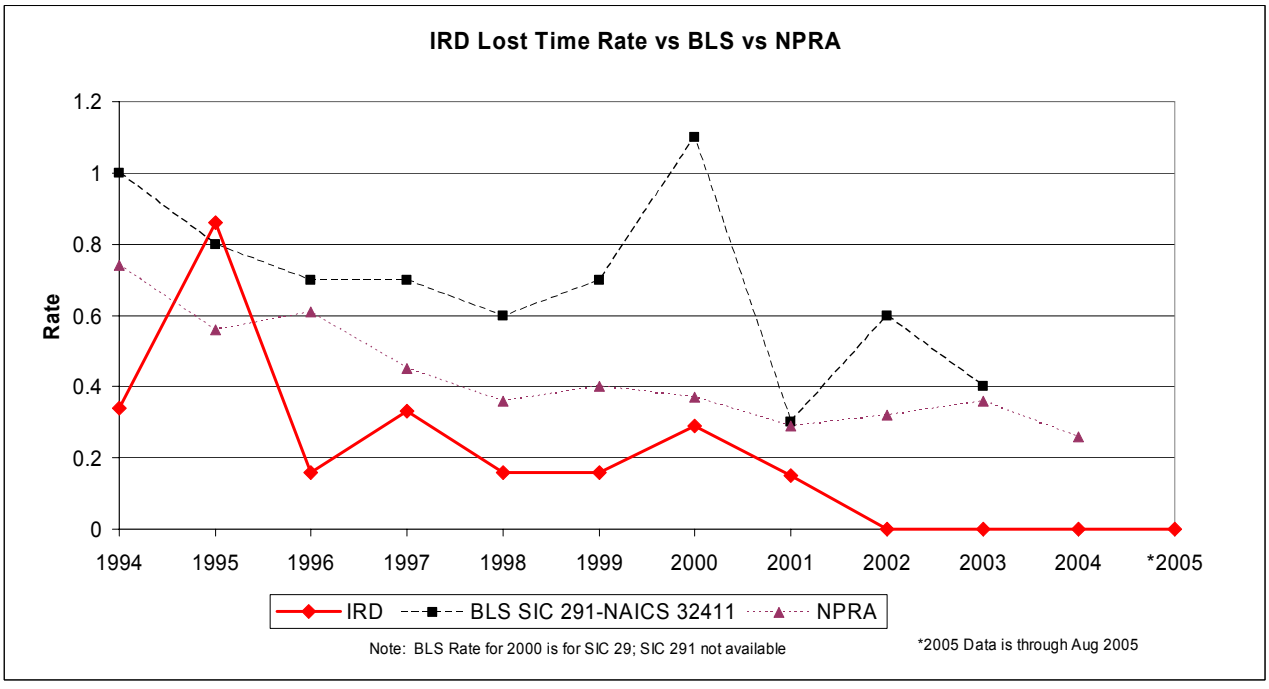
that each work group has their own representative. Facilitators rotate and are trained yearly. Maintenance employees were retrained in "awareness" training and encouraged to be trained as SHORT Shot observers.

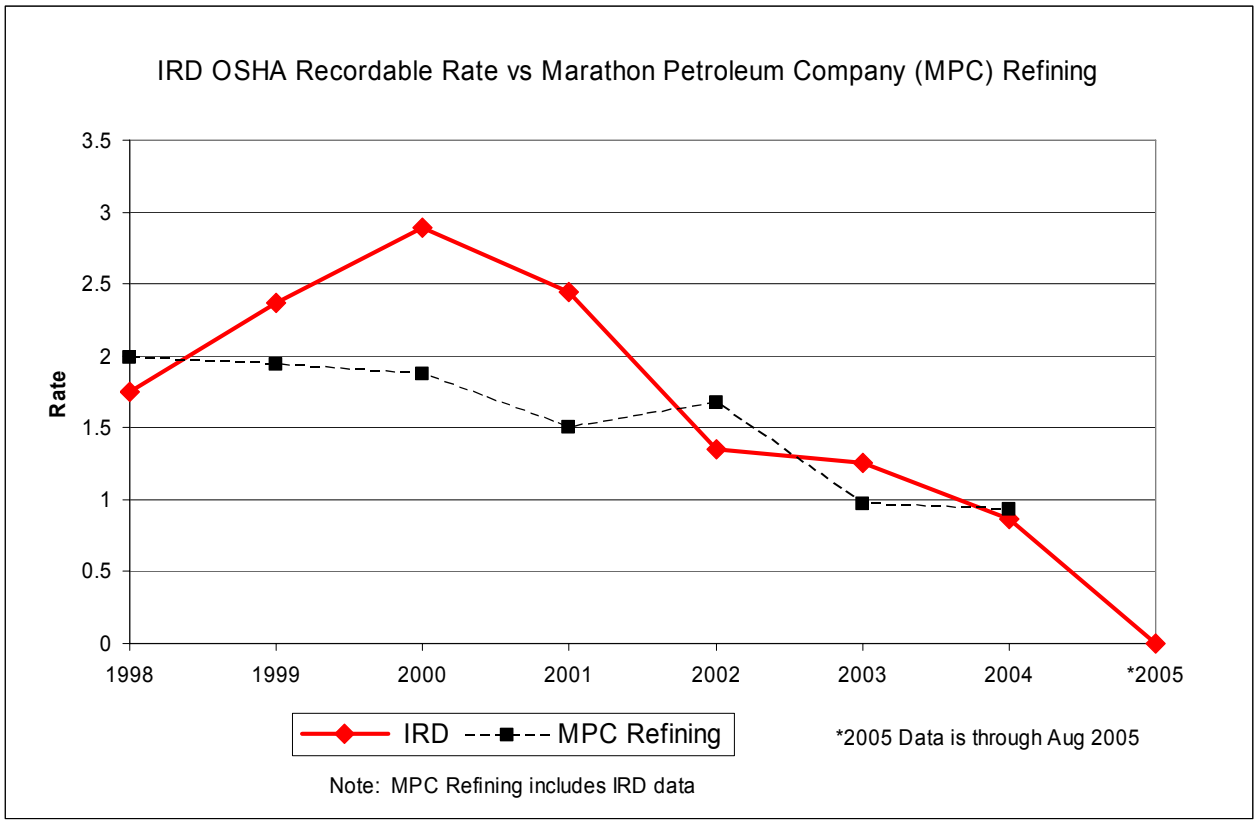
IRD and ACTS are working on methods to improve contractor safety records. Prior to 2005 safety meetings were being conducted in the contractor's own areas, and their coordinators/safety representatives attended a STEPS meeting monthly. In 2005, contract companies were invited to send their workers to IRD's BBS awareness' and SHORT Shot training. They were encouraged to use IRD's forms to be included in the ACTS observation data base. At this time, over 40 contractors have been trained to be SHORT Shot observers.

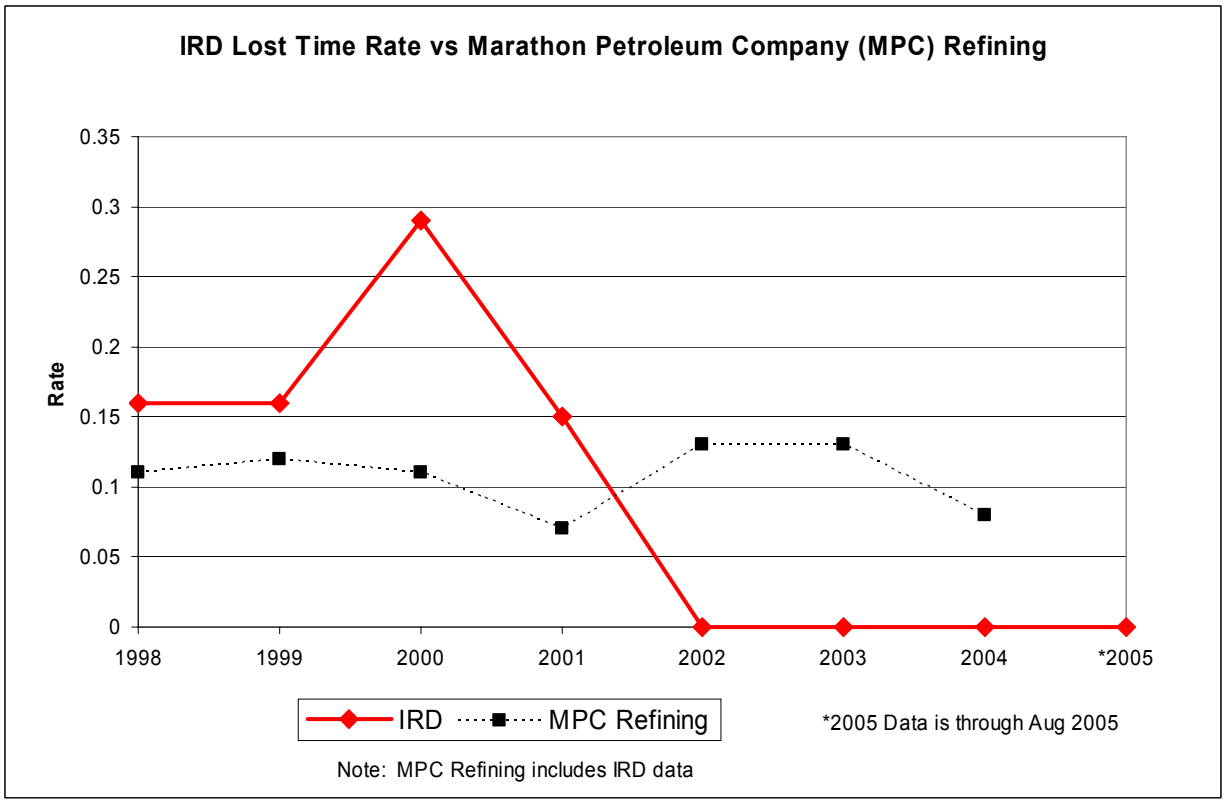
H. Graphic displays of the data:

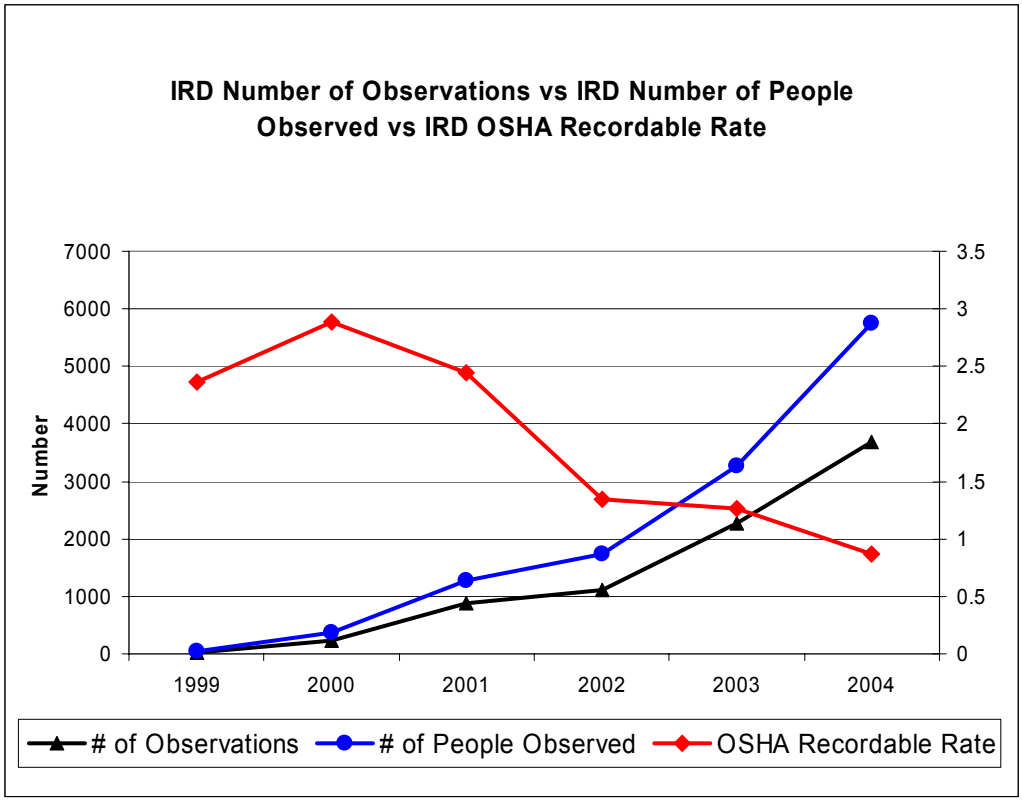


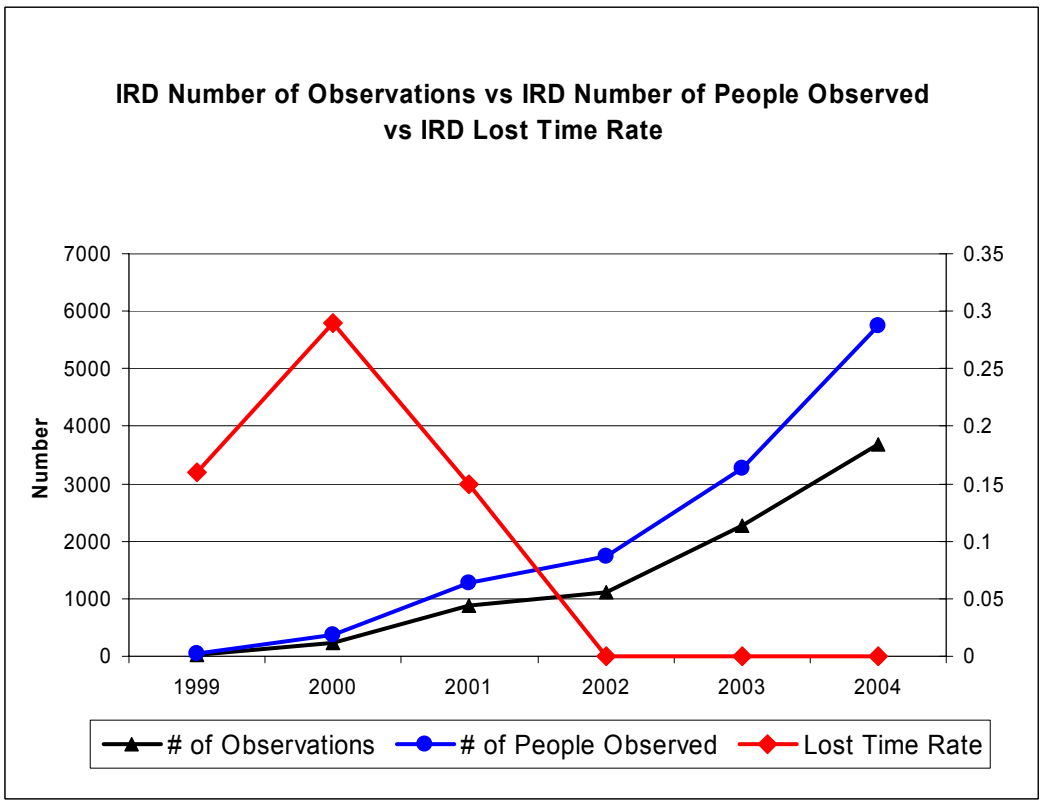


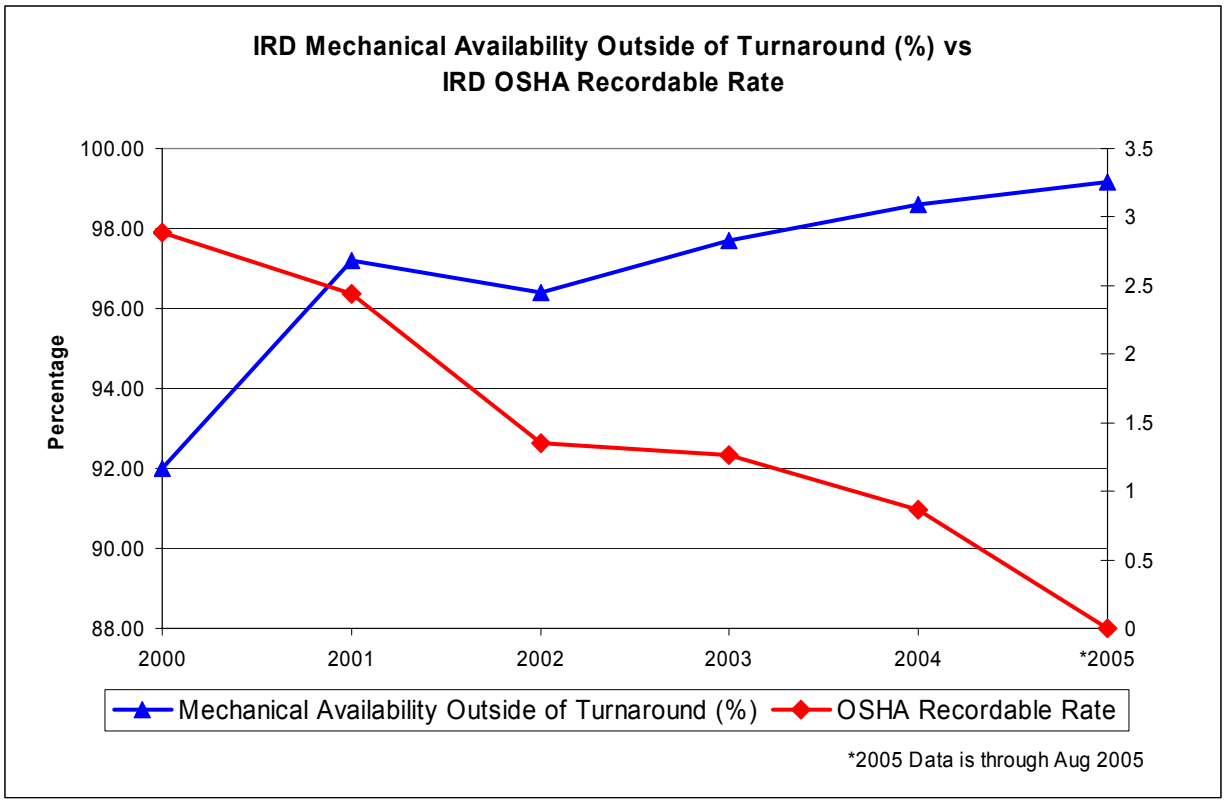


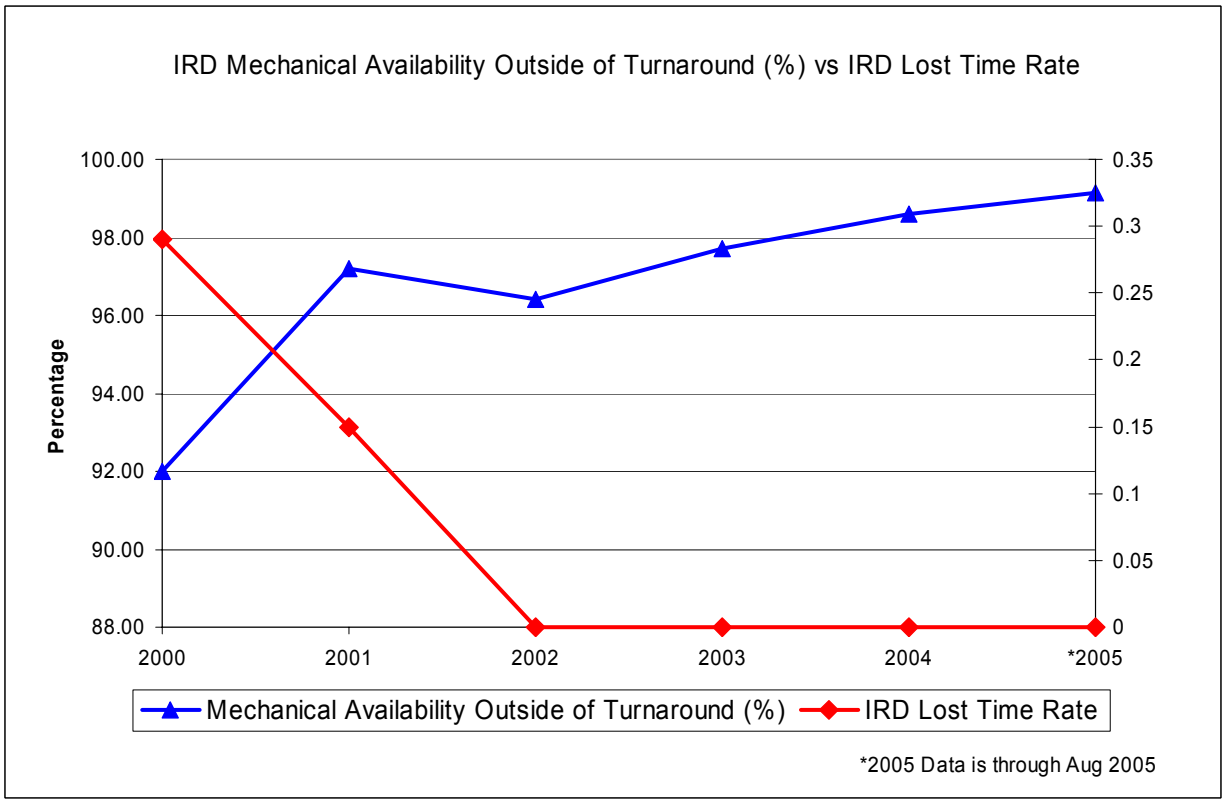












I. <u>Analysis of the data</u>: The data must be analyzed in straightforward ways and this analysis must yield evidence that important safety data are demonstrate improvements in safety performance when the PBBS program is in force than would be expected if it had not been implemented. Say exactly how you plan to analyze the data:

Prior to 1996, IRD had primarily management driven safety programs, with incidence rates that were unacceptable, with a total OSHA recordable incidence rate of 3.61 in 1994. This data was one indicator of the need to try new avenues for safety improvement. With a change in Division Management in 1995, the ACTS team was formed in 1996. This employee-led committee was charged with implementing a BBS program, but initially decided that they had to focus on bridging the trust and communication gap with management (See Section F for more detail).

In 1997, implementation of initial ACTS team initiatives, along with beginning the accreditation process for OSHA VPP Star status, began a great culture change within the refinery. Safety data supports the effectiveness of these two initiatives, showing a decrease in OSHA recordable incidence rates to 2.79 in 1997 and 1.75 in 1998.

However, after the VPP Star status was achieved in May, 1999, and with the ACTS team only partially focusing on BBS activities, the data reflects a time in IRD's history where the refinery became somewhat complacent, and total OSHA recordable incidence rates increased to 2.37 in 1999 and 2.89 in 2000. Through the VPP accreditation process, the refinery became aware of the need for management involvement. The year of 2000 was a key year of transition to develop more structured safety programs.

As described earlier in Section B, the NPRA Responsible Care® initiative is one of the frameworks that Marathon Petroleum Company (MPC) chose to demonstrate its commitment to the public and our employees. In 2000, Marathon Petroleum Company, LLC was among the first companies in our industry to sign up for this volunteer initiative, which focuses on improvement through implementation of key environmental, health, and safety procedures.

In 2001, the addition of ACTS SHORT Shot Observations and the implementation of the STEPS program, which tied all of our safety programs together by involving all levels of management, were key programs. As discussed earlier, a SHORT Shot Observation is a field safety survey of an on-going task that is designed to increase hazard recognition skills and raise awareness. The ACTS team had now become primarily focused on BBS, and management had an effective avenue to participate in safety through the STEPS program. The safety data, which shows a steady decrease in total OSHA recordable incidence rates from 2.44 in 2001 to 0.0 as of July, 2005, reflects the positive effect these major changes. Also, the Lost Time incidence rate has been 0.0 since 2002. These programs continue to be enhanced today.

Appendix A

MARATHON PETROLEUM COMPANY, LLC
ILLINOIS REFINING DIVISION
AREA INSPECTION REPORT

UNIT:_____ AREA/LOCATION:_____
DATE:_____ TIME:_____
INSPECTORS:_____RATING SYSTEM
E = EXCELLENT S = SATISFACTORY U = UNSATISFACTORY NA = NOT APPLICABLE NI = NOT INSPECTED

SAFETY CHECKLIST	RATING					LOCATION / COMMENT	ACTION PLAN	Completed (Y/N)	KMS (Y/N)
	E	S	U	NA	NI				
PPE SUPPLIES									
Eye/face protection									
Respiratory Protection									
Fall Protection									
Special Clothing									
Foot/Hand Protection									
Hearing Protection									
HOUSEKEEPING									
Shop Area									
Control Room/Lunch Room									
Office Area									
Work/ Jobsite Area									
Platforms/Towers/Tank									
Smoking Areas/ Other									
TOOLS & EQUIPMENT									
Right for the Job									
In Safe Condition									
Chains/Safety Gates									
Railings & Decking Structurally Sound									
GFCI or Assured Grounding (Contractor)									
Slings									

SAFETY CHECKLIST	RATING					LOCATION / COMMENT	ACTION PLAN	Completed (Y/N)	KMS (Y/N)
	E	S	U	NA	NI				
Equipment Guards									
All Signs and Labels Condition/ In Place									
Ladders/Stairs & Fixed/Portable									
Means of Egress									
Electrical Equipment Clearance (3' min)									
WORK PERMITS/ JOBSITE									
All Work Permit Sections Complete									
Lockout/Tagout									
Confined Space Entry									
COMPRESSED GAS CYLINDERS									
Work Area Cylinders									
Storage Area Cylinders									
STORAGE									
Tool Storage									
Supply Storage Area									
Flammable / Chemical Storage									
MATERIAL HANDLING									
Manual Lifting									
Mechanical Handling									
Barricades/Guardrails									
Drum/Tote/Container Labels & Condition									
Welding Machines									
Trenching/Excavations									
Scaffolds (Proper Tags)									
Lighting									

OVERALL COND.									

CONCERNS/ REMARKS:

Appendix B

"WHAT-IF" DRILL

DEPARTMENT / AREA_____WORK GROUP _____DATE_____

STATEMENT OF HYPOTHETICAL PROBLEM OR EMERGENCY:

_____
_____
_____
_____
_____

RESPONSE TO SITUATION:

_____
_____
_____
_____
_____
_____
_____
_____
_____

MATERIALS REVIEWED AND DISCUSSED (JHAs, MSDS, Standard Operating Procedures, etc.):

_____
_____
_____
_____

COMMENTS:

_____
_____
_____
_____
_____
_____
_____

Appendix C

Example of STEPS Meeting Agenda

1. Review of Current Safety Performance
- Summary of significant injuries/incidents in June.
- Review of trend data for First Aid cases and OSHA recordable injuries.
- Review man-hour milestones for injuries/illnesses
- Projected Total Refinery OSHA Recordable Rate through the end of the year assuming no additional injuries:
- Discuss any concerns and corrective actions

2. Department Activity Reports
- Review/discuss outstanding action items from area inspections
- Significant activities last month
- Feedback from safety meetings, audits and inspections

3. Behavior-based Safety Report
- Significant findings
- Review trend data summaries

4. Safety-related Work Order update
- Review the Work Order summary
- Progress update for significant items

5. Safety-related Project update
- # of new, closed and open Engineering Work Orders
- Progress update for significant items

6. PSM Recommendations Status
- Review the status of outstanding PSM action items.

7. Safety Training Update
- Review training status summary.

8. Reports from Standing Safety Committees or Focus Groups

9. Update on Special Issues

10. Safety Improvement & Prevention Activities/Plans

11. Discussion of any safety related issues or concerns

Appendix D

S.H.O.R.T. Shot Observation Checklist

ACTS RR337 Rev. 3/03

SHORT SHOOTER _____

People Observed _____ Date _____ Time _____

☐ Operations ☐ Maintenance ☐ Contractor ☐ Self-Observation

Location _____

Work/Video Observed _____

_____

S	Procedures	A
___	Permits	___
___	Mat'l Handling/Storage	___
___	Lock out/Tag out	___
___	Other _____	

S	Work Environment	A
___	Job Surroundings	___
___	Proper Lighting	___
___	Housekeeping	___
___	Other _____	

S	Tools/Equipment	A
___	Proper Selection/Use	___
___	Transportation/Travel	___
___	Condition	___
___	Process Equipment	___
___	Storage	___
___	Guards	___
___	Other	

S	PPE	A
___	Hand Protection	___
___	Foot Protection	___
___	Eye/Face Protection	___
___	Respiratory Protection	___
___	Hearing Protection	___
___	Fall Protection	___
___	Protective Clothing	___
___	Other _____	

S	People	A
___	Body Mechanics	___
___	Line of Fire	___
___	Pinch Points	___
___	Communication	___
___	Pace	___
___	Working/Moving	___
___	Carrying	___
___	Handrail	___
___	Other	

Barriers	
1	Business Systems
2	Equipment/Facility
3	Personal Factors
4	Culture
5	Personal Choice
6	Unsure of / Disagreement on Safe Practices

Comments,

Send completed copy through e-mail or through Intercompany mail to your ACTS Steering Committee Encouragement Team Member.

Feed Back (Circle one)	**Comment By** (Circle one)	**Follow Up** (Circle one)
None Success Guidance	Observer Observed Both	Yes No Complete In Progress

Barrier Examples

1. Business Systems – Tangible things that can be corrected by making things more accessible, better training or by changing ways of doing things. Example: "The proper tool was not available to do this job" or "The worker was not adequately informed and did not know it was an at-risk."

2. Facilities and Equipment – Acknowledged at-risk working conditions and/or equipment. Example: Operator slips on ice as a result of overhead steam leak, or "I was working in the thunderstorm because we had to line up a tank."

3. Personal Factors – Intangible things that deal with personal issues, such as excessive fatigue, stress, medication or illness, or lack of attention. Example: "I locked out the wrong pump because I was a little tired today. My kids are sick and I was up all last night" or "I was worried about a big job coming up tomorrow and I lost focus on what I was doing today."

4. Culture – An at-risk behavior which is a long-established practice. Example: "I didn't wear my hearing protection because we've never worn it before" or "We've always used a cheater to get this broken loose" or "I'd ask for help but everyone else lifts it alone."

5. Personal Choice – Worker has adequate skills and resources but chooses to work at risk to save time or effort. Example: "I know I should have worn my clear safety glasses to see more clearly, but I didn't want to go back inside to get them" or "I should have cleaned up that spill, but it's not my area" or "I should have put that hose up but I wasn't the one who used it."

6. Unsure of / Disagreement on Safe Practices - There is a disagreement with the SOP's or work rules, or the worker is not sure how to interpret the rules. Example: "The worker was unsure of whether

H_2S monitor was required for entering this area" or "The SOP does not apply to this job. The way I'm doing this job is the safest way."

Appendix E

FACILITATOR'S MASTER VIDEO OBSERVATION CHECKLIST

RR 320 Rev.7/00

Shared Video ☐

Area Unit _____ _____ Date _____ Time _____

S	Procedures	A	S	Work Environment	A	S	Tools/Equipment	A
___	Permits	___	___	Job Surroundings	___	___	Proper Selection/Use	___
___	Mat'l Handling/Storage	___	___	Proper Lighting	___	___	Transportation/Travel	___
___	Lock out/Tag out	___	___	Housekeeping	___	___	Condition	___
___	Other _____		___	Other _____		___	Process Equipment	___
						___	Storage	___
						___	Guards	___
							Other	
S	PPE	A	S	People	A	S	Hazards	A
___	Hand Protection	___	___	Body Mechanics	___	___	Environmental	___
___	Foot Protection	___	___	Line of Fire	___	___	Electrical	___
___	Eye/Face Protection	___	___	Pinch Points	___	___	Chemical	___
___	Respiratory Protection	___	___	Communication	___	___	Other _____	
___	Hearing Protection	___	___	Pace	___			
___	Fall Protection	___	___	Eyes on Task	___			
___	Protective Clothing	___	___	Carrying / Moving	___			
___	Other _____	___	___	Handrail	___			
				Other				

Comments, suggestions and notes

Barriers		
1. Business Systems		
2. Equipment		
3. Personal Factors		
4. Culture		
5. Personal Choice		
6. Disagreement on Safe practices		

Use back of sheet if additional space is needed.

Send completed copy through e-mail or through Intercompany mail to your ACTS Steering Committee Encouragement Team Member.

/Robforms/ACTS RR 320

Barrier Examples

1. Business Systems- "Every time I go to the store room to get gloves, they're out of stock". Or "This is the way I was trained to do this job."

2. Facilities and Equipment- "There's no way for me to get at that valve. It would be better if we could move it over here".

3. Personal Factors- "I'm a little tired today, my kids are sick and I was up all last night".

4. Culture- It's no big deal, everyone does it this way".

5. Personal choice- "I know I should have worn the hard hat, but I decided not to bother"

6. Disagreement on safe practices – "I don't think your definition of safe behavior is right. This is the safest way to do the job.

Appendix F

JOB HAZARD ANALYSIS

JHA #	Work Activity:	Page of	Date:
Unit # / Area # / Field Location:	JHA Writer's Name (s):	Foreman Name & Initials:	
Reviewed By:		JHA Upgrade Dates and Initials:	
Safety Rules / SOP's That Apply:			

Job Check List for Personal Protective Equipment:

Safety Equip. and Permits Required:

	Hard Hats			Safety Glasses			Ear Protection			Acid Gear		Fire Ext.			HW & E Permit
	Harness/Lan.			Safety Goggles			LO/TO			SCBA		LO/TO			
	Safety Shoes			Face Shield			Work Vests			Other		Barricades			
	First Aid Kit			H2S Monitor			Gloves								
Work Crew															

A. List Sequence of Basic Job Steps	B. Write Down Potential Hazards	C. Recommended Safe Procedure
1. In case of Emergency		1.1 Review Escape Proc./Exit Route/Assem. Area

Additional Comments Pertaining to Specific Job (Follow Up in Two Weeks On Any Comments or Changes to JHA)		

Appendix G

SAFETY PERFORMANCE REVIEW
Managers, Supervisors, Foremen, Chief Operators and Coordinators

Name: _____

Department/Area: _____

Review Period: _____ to _____

Rating Definition

1 - Far exceeds performance expectations
2 - Exceeds performance expectations
3 - Fulfills expectations in most behaviors
4 - Generally meets performance expectations in some behaviors
5 - Fails to meet performance expectations

I.	**Leadership**	**Rating**
	• Actively supports the Division's Safety Mission Statement and has reviewed with work group.	1 2 3 4 5 NA
	• Develops and effectively implements safety goals and that support the Annual Safety Improvement Plan.	1 2 3 4 5 NA
	• Always considers safety in operational/maintenance discussions/decisions.	1 2 3 4 5 NA
	• Knows responsibilities as outlined in Safety STEPS Process and carries out as appropriate.	1 2 3 4 5 NA
	• Creates an atmosphere that encourages employees to bring up safety issues, problems, concerns, etc.	1 2 3 4 5 NA
II.	**Safe Work Conditions**	
	• Area inspections are completed as required, team members are appropriately involved and substandard conditions are identified.	1 2 3 4 5 NA
	• Appropriate actions are implemented and tracked to correct	

unsafe conditions. 1 2 3 4 5 NA

- Housekeeping is a priority in the area and improvements are made as required. 1 2 3 4 5 NA

III. Rules and Procedures **Rating**

- Possesses significant knowledge with regards to rules and procedures that apply. 1 2 3 4 5 NA
- Always follows established rules and procedures. 1 2 3 4 5 NA
- Regularly and consistently enforces all safety rules and procedures. 1 2 3 4 5 NA

IV. Safe Behavior Development

- Provides coaching as required. 1 2 3 4 5 NA
- Fully supports JHA effort including utilizing JHA's as a regular training tool. 1 2 3 4 5 NA
- Emergency "what if" drills are conducted as required, data is utilized and necessary changes/training are completed. 1 2 3 4 5 NA
- Regularly utilizes safety statistical data to plan future preventive activities. 1 2 3 4 5 NA
- Individual tool box meetings are conducted in a timely, positive, specific manner. 1 2 3 4 5 NA

V. Safety Meeting

- Sequential STEPS safety meetings are completed monthly, are well planned and presented. Consistently follows-up on action items and suggestions resulting from safety meetings. 1 2 3 4 5 NA
- Attends and is an active participant in safety meeting. 1 2 3 4 5 NA

VI. Accident Investigation

- Ensures and encourages the proper reporting of injuries and near misses. 1 2 3 4 5 NA
- Corrective actions are defined, tracked, completed and reported on. 1 2 3 4 5 NA

VII. Other Requirements **Rating**

- Is up-to-date in terms of required safety training and personnel in area have completed required training. 1 2 3 4 5 NA
- Safety STEPS Manuals are maintained. 1 2 3 4 5 NA
- There are less than 10% KMS Action Items that are outstanding. 1 2 3 4 5 NA

VIII. Overall Numeric Rating _____

Comments (Strengths)

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Comments (Performance Improvement Areas)

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

Employee Signature: _____

Reviewing Supervisor: _____

7/15/02

SAFETY PERFORMANCE REVIEW
Non-Supervisory Personnel

Name: _____

Department/Area: _____

Review Period: _____ to _____

Rating Definition

1 - Far exceeds performance expectations
2 - Exceeds performance expectations
3 - Fulfills expectations in most behaviors
4 - Generally meets performance expectations in some behaviors
5 - Fails to meet performance expectations

I.	**Leadership**	**Rating**
	• Actively supports the Division's Safety Mission Statement.	1 2 3 4 5 NA
	• Always considers safety in operational/maintenance discussions/decisions.	1 2 3 4 5 NA
	• Knows responsibilities as outlined in Safety STEPS Process and carries out as appropriate.	1 2 3 4 5 NA
	• Brings up safety issues, problems, concerns, etc.	1 2 3 4 5 NA
II.	**Safe Work Conditions**	
	• Participation in area inspections, as required.	1 2 3 4 5 NA
	• Completes assigned action items to correct unsafe conditions.	1 2 3 4 5 NA
	• Actively works to keep work area neat and orderly to improve housekeeping.	1 2 3 4 5 NA
III.	**Rules and Procedures**	**Rating**
	• Possesses significant knowledge with regards to rules and procedures that apply.	1 2 3 4 5 NA
	• Always follows established rules and procedures.	1 2 3 4 5 NA

IV. Safe Behavior Development

- Fully participates in JHA effort, when requested. 1 2 3 4 5 NA
- Participates in emergency "What If" drills, as required. 1 2 3 4 5 NA
- Participates in ACTS videos and Short Shots. 1 2 3 4 5 NA
- Has a willingness to stop a job for safety reasons or point out unsafe behavior. 1 2 3 4 5 NA

V. Safety Meeting

- Attends and is an active participant in safety meeting. 1 2 3 4 5 NA

VI. Accident Investigation

- Reports injuries and near misses. 1 2 3 4 5 NA

VII. Other Requirements **Rating**

- Completes required safety training. 1 2 3 4 5 NA

VIII. Overall Numeric Rating _____

Comments (Strengths)

_____
_____
_____
_____
_____
_____

Comments (Performance Improvement Areas)

_____
_____
_____
_____

Employee Signature: _____

Reviewing Supervisor: _____

1/5/04

Appendix H

STEPS Safety Process Audit

Department / Area / Work Group:_____Date:_____
Audit Team Members:_____
_____

YES NO

Category 1 – Safety Meetings

____ ____ **Work Group**

- ❑ Completed as required
- ❑ Attendance
- ❑ Planning
- ❑ Quality of Meeting
- ❑ Follow-up

Category 2 – Safe Work Conditions

____ ____ **A. Fixed and Portable Safety Equipment Inspections**

- ❑ Inspections Completed
- ❑ Checklist updated within past year
- ❑ Deficiencies noted and corrected

____ ____ **B. Area Safety Inspections**

- ❑ Checklist Completed
- ❑ Deficiencies noted
- ❑ Corrective action initiated

____ ____ **C. Safety-related Work Order Log and Engineering Projects Log**

- ❑ Current Safety Work Order Log
- ❑ Current Engineering Project Log

Category 3 – Safe Behaviors

____ ____ **A. Safety Rules and Procedures**

- ❑ Were Standard Operating Procedures (SOP's) followed during audit

- Employees wearing proper PPE

____ ____ **B. Safety Training Plan**

- Completed per schedule

____ ____ **C. Job Hazard Analysis**

- Completed per schedule
- Multiple Work Group members involved
- Available to all Work Group Members

____ ____ **D. ACTS observation videos / SHORT shot observations**

- Completed per schedule
- Reviewed with Work Group
- Data tracked and utilized

____ ____ **E. Tool Box Meetings**

- Completed per schedule

____ ____ **F. Individual Tool Box Meetings**

- Completed per schedule

Category 4 – Emergency Response Systems

_____ ____ **Emergency Drills and Exercises**

- "What-If" drills conducted as required
- Corrective Action initiated

Comments:_____
_____
_____
_____
_____
_____

Appendix I

Marathon Petroleum Company, LLC
Incident Report

Part 1	Complete within 24 hours of Incident
Date:	**Time:**
Location:	
MPC Personnel Involved (indicate with * beside name if Initial Witness Statement was completed):	
Contractor Personnel Involved (indicate with * beside name if Initial Witness Statement was completed):	
Type of Equipment Involved:	
Incident Description:	**Category (check one):** ☐ 1 ☐ 2 ☐ 3 ☐ 4

Types (check all that apply):

☐ Accident	☐ Mechanical	☐ PSM
☐ Designated Environmental Incident (DEI)	☐ Near Miss	☐ PSM Near Miss
☐ During Maintenance	☐ OSHA Injury/Illness	☐ Reliability
☐ Electrical	☐ Operational	☐ Security
☐ Environmental – Non DEI	☐ Product Quality	☐ Third Party Damage
☐ Explosion	☐ Property Loss	☐ Vehicle Accident – DOT
☐ Fire	☐ Potentially Serious Incident	☐ Vehicle Accident – non DOT
☐ Lost Opportunity		

Material Released (if applicable):		**Amount :**		**Duration:**	
Persons Notified / Time:					

Preliminary Cause:	
Immediate Action Taken:	**Work Order Number:**
Comments / Suggested Recommendations:	
Signature/Date:	

Part 2 (Category 1 Incidents only)	**Complete within 20 days of Incident**
Cause:	

Recommendations	**Responsible Person (one name each)**	**Due Date**

Comments:	**Reviewed with Managers (NA or provide date):**
Signature/Date:	

Part 3 (Category 2, 3, or 4 Incidents only)	**Complete within 20 days of Incident**
TapRooT® Investigation Initiated (provide date):	
Comments:	
Signature/Date:	

Attachments	
Attachments (list below):	**Total Number of Pages Attached:**
A	
B	

Appendix J

Safety Opportunities Shared (SOS) Form

Mission Statement:

To prevent the occurrence or recurrence of events that may lead to injury, illness or fatality by sharing our experiences with others.

Date _____

Name (Optional)		Job Type	**OPTIONAL ITEMS**				
Area (Optional)			Routine		Rush Job		
			OPM		Start Up		
			Emergency		Shutdown		
Environmental Conditions			Other (Specify)				

What happened or almost happened?

What were the results or what could have resulted?

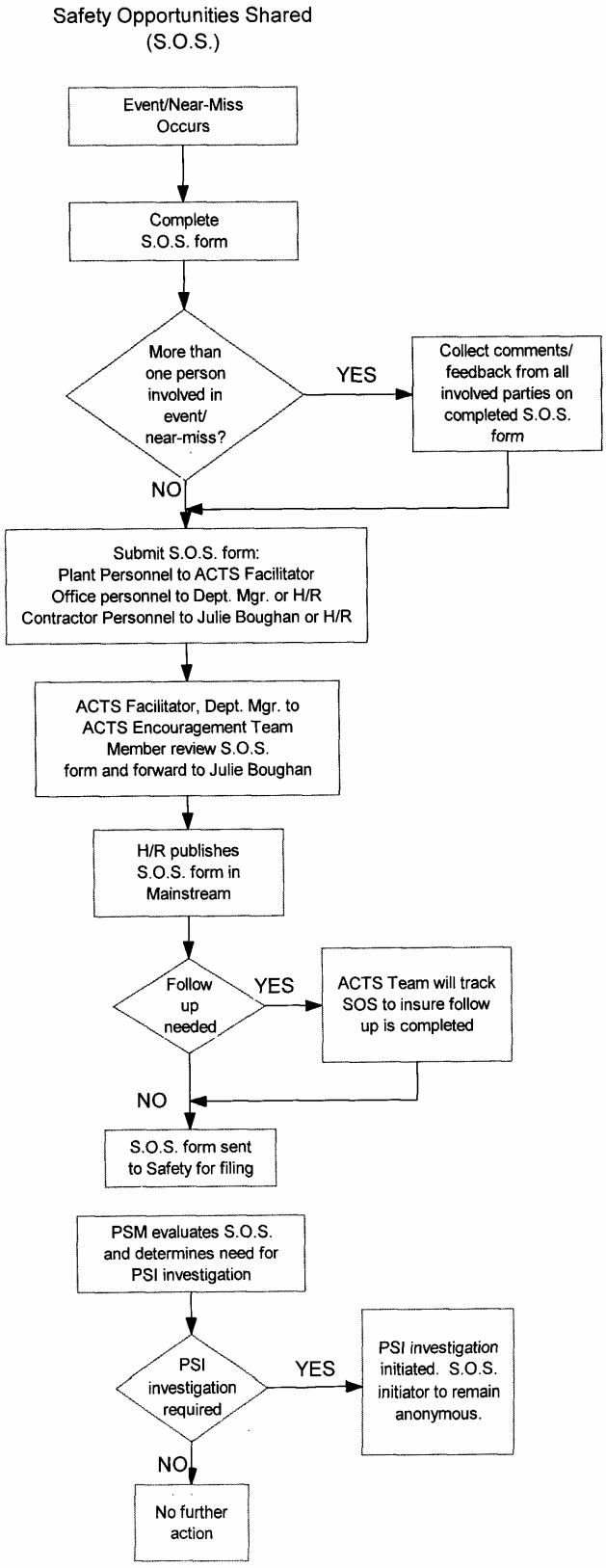
Suggestions on how to prevent an occurrence or recurrence?

Is additional follow up or corrective action needed?	YES		NO	

(Please attach additional sheets if more space is needed)

S	Procedures	A	S	Work Environment	A	S	Tools/Equipment	A
	Permits			Job Surroundings			Proper Selection/Use	
	Mat'l Handling/Storage			Proper Lighting			Transportation/Travel	
	Lock out/Tag out			Housekeeping			Condition	
	Other			Other			Process Equipment	
							Storage	
							Guards	
							Other	
S	PPE	A	S	People	A	S	Hazards	A
	Hand Protection			Body Mechanics			Environmental	
	Foot Protection			Line of Fire			Electrical	
	Eye/Face Protection			Pinch Points			Chemical	
	Respiratory Protection			Communication			Other	
	Hearing Protection			Pace				

☐	Fall Protection	☐	☐	Working/Moving	☐
☐	Protective Clothing	☐	☐	Carrying	☐
☐	Other _____	☐	☐	Handrail	☐
			☐	Other	☐



SOS Form Elements:

1. Anonymous - Including your name, work area and job type on this form would facilitate improved follow-up and feedback on this event (and allow you to earn points in the HES Recognition Program). However, you are permitted to omit this information if you wish.

2. There is no intent for any disciplinary action as the result of reporting of a SOS.

3. If applicable collect additional comments and feedback from all parties involved in the SOS before forwarding form.

4. Send completed SOS forms to one of the following:

Plant Personnel send to your Facilitator, Office Personnel send to the ACTS Coordinator, Contractor Personnel to Safety Dept.

5. SOS's will be printed in the Mainstream. Why? To prevent the occurrence or reoccurrence of events that may lead to injury, illness or fatality by sharing our experiences with others.

6. If follow up or corrective action is needed, SOS form will be forwarded to the ACTS Team to track to insure completion.

7. All SOS's will be evaluated for the possibility of further investigation based on Standard Operating Procedure (SOP) #14. If the event becomes a Potentially Serious Incident (PSI), the originator will remain anonymous unless he/she chooses to volunteer information for the investigation.