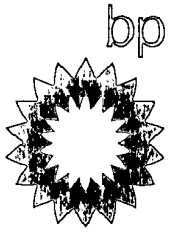

Management Accountability Project

Texas City Isomerization Explosion
Final Report

February 2007

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Report

Final Report of the Management Accountability Project: Texas City Isomerization Explosion (Hoffman, Gower, Parus, Lucas, Willis)

I. Introduction

The explosion in the Isomerization Unit at the Texas City Refinery on March 23, 2005 killed 15 people and injured 170, and for some victims, this resulted in disfigurement and associated trauma for a lifetime. The financial cost and damage to BP's reputation were extraordinary and unprecedented in the history of BP. The "Management Accountability Project" was conducted against the backdrop that a single incident caused so much pain, misery and unintended consequences for so many.

It should not be overlooked that serious mistakes and failures were at the root of the explosion for which the ISOM staff clearly is responsible. BP's management, however, was ultimately responsible for assuring the appropriate priorities were in place, adequate resources were provided, and clear accountabilities were established for the safe operation of the TXC refinery. It therefore remained necessary for BP to investigate whether certain management levels in BP failed to carry out their management accountabilities by not complying with BP's "Management Framework" and "The Code of Conduct" and if so, to recommend appropriate action. Observations and recommendations are also included at the end of this report which are intended to prompt further consideration by our senior management.

This report is intended only as an internal management review. It is not intended for any other purpose.

II. Process

a. Project Team

The management accountability team was led by Wilhelm (Bill) Bonse-Geuking, who was Group Vice President and Region Head (Europe) at the time he was appointed in January 2006. Joining Mr. Bonse on the team were Rudy Blyweert, Vice President, Safety and Operations, BP Group; Stephanie Moore, Vice President, Human Resources, E&P Decentralized Functions; and Jeffrey Heller, Assistant General Counsel, Legal. The team was assisted primarily by Margene Westlund, a paralegal who worked for Mr. Heller, along with Mr. Heller's assistants (Rose Tillman and Karen Klimkiewicz).

The members of the team were confirmed by John A. Manzoni, Sally Bott and Peter Bevan. The project team brought the perspective of other functions and segments within BP, as well as knowledge and experience about BP management practices.

b. Terms of Reference

The management accountability project was guided by terms of reference summarized as follows:

- The project team was requested by senior BP leadership to examine management accountability for the disaster beyond the initial accountability determinations made by local management in May 2005. It was not the task of the team to reconsider any aspect of the prior internal BP investigation (commonly referred to as the Mogford Report).
- The project team reviewed the prior disciplinary process, conducted by Kathleen Lucas and assisted by Willie Willis, which was designed to place accountability on those persons directly responsible for the disaster. The team is in full agreement with the conclusions and actions that were taken resulting in the termination of six individuals who were most directly accountable for the ISOM explosion.
- The project team established its own procedures (described in more detail in a later section of this report).
- The team was not given any restrictions on how it would perform its work nor was there any restriction about who would be potentially considered in its review of management accountability.

The team worked by a consensus decision making process. This process covered all the significant facets of the team's work in identifying who would be interviewed, the manner and the method of deliberations, and the final report.

The team was specifically requested to provide a report back to Sally Bott and Peter Bevan concerning its conclusions and recommendations including any employment actions warranted based on its review. The team's assumption has been that Sally Bott and Peter Bevan would share the conclusions and recommendations with others as they deemed appropriate.

Because John Manzoni, who is a member of the Board of Directors and a Managing Director, was within the scope of the team's review, it was determined that a separate report would be written concerning him which would also be directed to Sally Bott and Peter Bevan for further consideration as they deemed necessary.

c. Process

The management accountability team began its work in early February 2006 by first establishing the basic principles that the team would adhere to in handling the investigation, the methodology it would adopt in reviewing and sorting the data, and identifying the principal sources of information it would consult. Subsequently the team commenced its work by gathering and reviewing various reports and documents related to the ISOM disaster.

The team considered documents which were produced during the investigation by the Mogford team and/or were produced during the concomitant civil litigation that involved injury claims arising from the disaster as well as several audit reports and presentations

covering the 2002-2005 period. By late November 2006, the team had gathered seventeen three-inch binders of material, along with some other sundry documents, constituting many thousands of pages. Each team member was provided a set of all materials and for the most part, every team member reviewed all or practically all of this material.

A critical part of the team's work was to conduct interviews with individuals associated with the incident. And, it was also necessary to conduct these interviews in a way that would not jeopardize the safe re-start of the Texas City Refinery. At the request of the CEO R&M Segment, the team, therefore, did not commence direct interviews until mid-April 2006, and only later in May did interviews commence at Texas City Refinery after the successful re-start of part of the refinery. Ultimately, the team interviewed 28 individuals. Except for a small number of telephone interviews, all interviews were conducted face-to-face and with at least two of the four team members physically present.

The interviews were not confrontations (at least from the team's perspective) nor were persons questioned in a manner similar to that which occurred in the on-going civil litigation. Rather, the interviews were conversational and the team sought to create a dialogue with each individual to enable the interviewees to discuss what they knew. The team also followed a general framework for interviews in most cases to insure some consistency of approach.

While the team was very interested in listening to various individuals, the team also had access to substantial documentary information, much of which was contemporaneous and in some instances provided the best overall picture of the circumstances. Most of the interviews were helpful to understand events but in making its conclusions and recommendations, the team generally accorded no greater weight to any interview when pertinent documents were also available. Finally, in most instances, a single set of notes was created for the team's records of each interview.

The team met multiple times and also conducted routine telephone conferences to either review and discuss the information it had gathered or for the purpose of conducting interviews. The meetings required substantial travel for most of the team members in addition to many hours of study and review. The team met in mid-July 2006 to take stock of the views and opinions of the members.

The team determined that they were generally aligned with each other on their overall views, and then planned to conduct the last interview of Don Parus. The interview of Don Parus was conducted in October, 2006. The team determined that in light of the planned release of the Baker Panel report in November or December, 2006, it would wait to review the Baker Panel report to determine if any additional insight could be gleaned from the document before finalizing its report. The team understood that the Baker Panel was tasked with examining BP's safety culture across all of its refineries, not just Texas City. Such an examination by its nature would include management practices, which could to some extent parallel or overlap the team's work. Following a review of the Baker Panel report, which was issued on January 16, 2007, the team determined that in fact, many of its conclusions concerning management actions or inactions paralleled the Baker Panel findings. Therefore, the team immediately began to finalize its report. Unlike the Baker Panel report, however, the task of this team was to examine specific individual management accountability.

III. Foundations for Management Accountability

a. BP Management Framework

The over-arching governing principles for the management accountability team are found in BP's "Management Framework" document (referred to as "BPMF"). BPMF sets forth BP's internal expectations for management and corporate governance. Among other concepts, BPMF sets forth that accountability must be defined and established between a manager and his or her superior. Each person accepting accountability (defined as the obligations and commitments given by an individual to deliver agreed activities) is responsible to clarify the expectations with their manager(s). In turn, those delegating accountability must clarify requirements, routinely access information related to the accountability, and monitor the actions of the designates.

We started our work by examining the role and duties of managers and leaders accountable for the safe operations of Texas City refinery on March 23, 2005. The BPMF is well known to all of BP's group leaders. Indeed, many of the BPMF principles were repeated for the Refining organization in a document called the "Blue Book", an undated document, which was apparently published sometime in 2005. It was the view of the team that BPMF principles should inform its analysis of management actions.

b. Texas City Site Culture

The Mogford Report identified that there were some significant issues at the Texas City Refinery pertaining to its safety culture. Similarly, the U.S. Chemical Safety Board (CSB) urgently recommended that BP appoint an independent study group to examine cultural aspects that may underlie some of the risk-taking behaviors evident from initial investigations. The "Baker Panel" was created largely in response to the CSB's recommendation, and its report thoroughly analyzed the safety culture at Texas City Refinery.

The "Management Accountability Project" has not and does not seek in any way to duplicate the work of any other group. However, it became evident also to the management accountability team that there were some significant cultural issues at Texas City, and to some extent in the Refining leadership generally, which influence both management and employees and are not accounted for in a typical model of management accountability based on the BPMF principles. In many ways, our conclusions are very similar to those expressed by others who have considered the subject.

The team therefore sought insight from various sources concerning how some cultural dimensions such as a high tolerance for risk taking may have played a role in management's assessment of its own roles and accountabilities. Stated another way, it is virtually impossible to study management accountability strictly from the viewpoint of the BPMF without considering the culture at Texas City that tolerated risk taking both at this refinery and apparently within some aspects of the Refining organization generally. This will be discussed in greater detail in a later section of this report.

c. Accountability Matrix

The management accountability team developed a matrix (attached to this Report) to summarize the key findings it made about certain individuals. (The matrix is further accompanied by a section of supporting notes and references for each individual.) The matrix in turn was informed largely by the accountability principles the team considered from BPMF. The matrix allowed the team to discuss each individual using a common set of questions which identified key aspects of management accountability:

- What were the accountabilities of each person related to this accident?
- What information did they have or not have to carry out their roles?
- Did this person act appropriately with the information s/he had to carry out his or her accountabilities?
- Were there factors that might be considered aggravating or mitigating for an individual?
- What conclusion or outcome could be drawn about this person?

The possible outcomes were defined as: lack of competency; inattention; poor judgment; failure to perform duties; other.

d. BP Code of Conduct

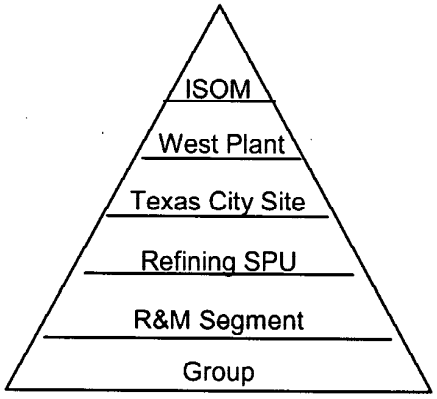
The management accountability team also reviewed BP's Code of Conduct to determine if there were any provisions of the Code which might be applicable to any behaviors, actions or inactions that may have contributed in any way to the ISOM disaster. The team did not find any actions, inactions, or other behaviors of the persons it considered which in any way implicated any provisions of BP's Code of Conduct. (Note that six individuals were terminated in May 2005 for violations of the local Texas City Refinery "Posted Rules"; the team did not consider whether or not the behaviors of these individuals may or may not have failed to meet the standards of the Code of Conduct.)

IV. Recommendations Based on the Matrix

a. Culture v. Management Accountabilities

Before discussing individual accountability, it is important to link some of the management accountability principles to the entire ISOM disaster and its context both within BP and the cultural and behavioral aspects that largely contributed to the disaster.

First, many of the management accountability failings we discovered permeated the entire BP organization:



The accountability delegations were muddled and confusing throughout the organization from the ISOM unit all the way to the R&M Segment leadership. For instance, Willie Willis convened a group shortly before the disaster to study and define accountabilities in the West Plant (the ISOM unit was a part of the West Plant). Similarly, the accountabilities, delegations and authority were confused at the Texas City site level, and between Texas City management, the Refining SPU, and the R&M Segment leadership.

Second, it was also apparent (team members attested visually) that the Texas City Refinery had not been adequately maintained for some years prior to 2002. While capital spending increased beginning in 2002, the infrastructure had deteriorated substantially, and it was apparent from the ISOM unit all the way to the Segment leadership that too few resources were directed to this problem.

Third, it is important to understand that neither poorly maintained assets nor muddled and confused lines of authority directly contributed or caused the ISOM tragedy. Indeed, none of the management accountability failings identified by the team caused the disaster. Rather, the culture prevalent at Texas City Refinery was the single most direct causal connection point as evidenced in part by these incidents:

- A unit was started up, although apparently no clear start-up order was given, and an operator who was not considered one of the most competent ISOM operators worked the control board.
- A very competent step-up supervisor sat in the satellite control room and took insufficient corrective action while he and others saw that too much product was poured into the splitter tower and the temperature and pressure continued to build.
- Both ISOM staff and management failed to announce generally within the Refinery, a unit start-up at the beginning of the day shift.
- A supervisor missed a hand over, came into work late, and then left early without a proper hand over to his relief at the critical time of a unit start-up.
- A supervisor was in charge of the ISOM who was not fully qualified on the unit.

In sum, the Texas City Refinery had a culture of risk taking coupled with a failure to understand the process safety implications of prior incidents (resulting in 3 deaths and a major explosion in the 12 prior months), a long tradition of failure to comply with simple procedures, the desire to avoid conflict within its organization, and a penchant for placing persons in key roles who lacked adequate professional training.

There were many management failures from the ISOM unit all the way up to R&M Segment leadership. A culture that evolved over the years seemed to ignore risk, tolerated non-compliance, and accepted incompetence – all of which were present on the night shift on March 22 and the day shift on March 23, 2005.

Finally, Texas City Refinery either did not learn or did not apply the lessons from prior incidents at Texas City and other BP refineries including the prior Grangemouth incidents. To his credit, Don Parus investigated and learned that there had been 23 deaths over the past 30 years at Texas City Refinery prior to the ISOM disaster. He began to speak to management and his workforce at all levels about this appalling record.

But Texas City Refinery was also a place with a culture deeply imbued with risk taking often times without a clear mitigation plan. Texas City, and the Refining SPU and Segment leadership did not understand the real cultural issues and they therefore did not establish the correct priorities. They focused on individual safety KPI's only, which told them they were doing fine. The initiatives created by Don Parus – "Just Culture", "1000 day goals" – missed the point. They did not work as far as improving process safety or otherwise mitigating a culture of risk taking. What was needed was leadership that put process safety first, recognized risks and required that persons be placed in roles based on competence.

Management failures must be identified so we can learn the lessons of the past and never repeat them. We should hold management, at least, to the same standards of performance to which we also hold other employees responsible.

As a consequence, management accountable for the operations of the Texas City Refinery has to be judged and held accountable for its management shortcomings regardless whether they had any direct causal impact on the ISOM disaster. Our consideration, therefore, does not place fault based on hindsight; rather, our consideration is predicated upon an analysis of the information relevant individuals had at the time and whether their actions were consistent with the management accountability framework set forth in BPMF, which is the same standard used by our senior leadership on a daily basis.

b. Tiers 1-4

Building upon the local Texas City investigation conducted by Kathleen Lucas that assessed discipline for the disaster, the team considered which persons potentially had management accountability, direct or shared, for any other aspect of the disaster (including Lucas and Willis themselves). The matrix immediately following lists those persons and places them in the appropriate level of accountability tier. (It was determined that other persons, notably Ross Pillari, did not have any management accountability related to the disaster).

Category	Description	Individuals
Tier 1	Direct accountability for substantial management activities; aggravating factors generally outweigh mitigating factors	Mike Hoffman Pat Gower Don Parus Willie Willis
Tier 2	Direct accountability for substantial management activities; balance of aggravating and mitigating factors	
Tier 3	Accountability (direct or shared) for management activities; mitigating factors, outweigh aggravating factors or other considerations	Kathleen Lucas Joe Barnes Bill Ralph
Tier 4	Persons who did not have accountability at the time of the disaster but previously held some accountabilities	Rick Hale Ray Hawkins Rich Peltier

c. Summary of Disciplinary Recommendations

The management accountability team initially considered a wide range of possible outcomes and conclusions, including whether there was intentional or willful conduct of any type by managers that exposed employees and contractors to risks. The team found absolutely no evidence of any gross negligence or of any willful or intentional behavior that contributed in any way to the ISOM disaster. Rather, the team found that some managers failed to adequately perform their roles and duties based on their accountabilities, or demonstrated poor judgment or the failure to lead properly based on their accountabilities.

Tier 4 Individuals:

Three persons were placed in Tier 4: Ray Hawkins, Rich Peltier and Rick Hale. These individuals each had significant management accountability in the past related to the ISOM unit, but they had no accountability for the March 23, 2005 disaster.

Rick Hale had been the Refinery Manager for about two years, and he left that role in June 2004. Ray Hawkins had been the Superintendent of the ISOM/ARU/AU2 complex until January, 2005, when he was reassigned to manage the turnaround at a neighboring unit. Rich Peltier had been the supervisor at the ISOM unit until September 2004 when Willie Willis assumed accountability. The management accountability team determined that their accountability was simply too remote to the incident to warrant any further review. Moreover, Peltier had tried to do a proper handover with Willis, but Willis ignored his request.

Hawkins, in the team's opinion, was not well-qualified to hold a superintendent post and he has not held a position of management responsibility since the accident. Hale had left the refinery 10 months before the disaster. No further review is warranted here.

Tier 3 Individuals:

Tier 3 individuals held a position with some degree of management accountability, but there were substantial mitigating factors. Three persons were placed in Tier 3: Joe Barnes, Bill Ralph and Kathleen Lucas.

Joe Barnes was made the HSSE manager at Texas City in September 2004, and he became responsible for process safety in January 2005. In the team's opinion, Joe Barnes should have never been placed in that role as he had no training for these duties. Rather, Don Parus, who placed him in the role because he had a "passion for safety", largely bears justified criticism for not putting a more qualified person in this role.

Bill Ralph was invariably the Process Safety coordinator at Texas City Refinery for many years. Ralph attempted to sound the alarm to process safety risks at the refinery, but in many respects his voice was not heard. This occurred largely because he was perceived to be a self-promoter and others tired of listening to his efforts to gain a higher profile. It is in many ways regrettable that he could not have been more influential.

Kathleen Lucas was made the Operations Manager at Texas City Refinery in January 2005. She had last worked at the site in 1995 and she was appalled by the general state of disrepair when she returned. She began several actions designed to improve the facility, but she simply was not there long enough to have any influence or share any accountability for the disaster. Her authority was also directly undermined by Don Parus and she was not adequately supported by Gower and Hoffman.

No further review or action is warranted on these individuals.

Tier 1 Individuals:

Four individuals are placed in Tier 1: Mike Hoffman, Pat Gower, Don Parus, and Willie Willis.

This tier is defined by persons who held direct accountability for substantial management activities, and who failed to perform their duties in a manner consistent with BP's expectations. Each individual is discussed in more detail in Section V, but several key points should be noted:

- First, three of the four individuals (Hoffman, Gower, Parus) held group leadership posts; the fourth individual (Willie Willis, West Plant manager), was a Level E manager, but according to his managers was considered a potential future refinery manager and group leader.
- Second, the team found multiple areas for each individual where they failed to perform adequately as managers.
- Third, there is a substantial difference of degree when considering the management deficiencies noted for these individuals compared to others considered.
- Finally, each individual has had a distinguished career and exhibited many fine qualities consistent with better-caliber leaders in BP.

Willis is truly an impressive story of how someone advanced in an organization by exploiting every ounce of talent he had despite lacking strong formal technical training and background.

Gower and Parus devoted their careers to this company largely in refining environments and have held many positions of substantial management authority with significant past accomplishments.

Hoffman similarly devoted his career to refining and this company, and perhaps more than many others combined substantial technical skills with past leadership accomplishments as a refinery manager.

V. Disciplinary Recommendations: Detailed Analysis

The team believes that each of the individuals identified in Tier 1 (Hoffman, Gower, Parus, Willis) failed to perform their management accountabilities in significant ways, and recommends that BP seek ways to conclude their employment relationships on fair and just terms, in a timely manner.

a. Mike Hoffman, GVP Refining & Marketing

Since 2002, Mike had line accountability for Refining in the Segment, including process safety management. He was also the HSE tag for the R&M Segment Executive Team. Mike's deep technical expertise and knowledge stemming from a solid career in refinery operations combined with his accountability for all of BP's refineries put him in a unique position to place Texas City Refinery in its proper perspective for the Group.

Nevertheless, he doesn't appear to have drawn the necessary inferences from the warning signals that were expressed in the 2002 AT Kearney Report. Despite all of the messages and signals, we found that he did not regularly ask fundamental questions which might have highlighted operational risks at the TXC refinery. This is further demonstrated by Mike's lack of personal contact to the Refinery. Despite TXC being the largest refinery, he does not appear to have given them the proper focus as illustrated by his lack of personal visits even after the occurrence of alarming incidents in 2004 (one explosion and three fatalities).

Mike was well aware of the years of under-investment at TXC refinery both from presentations and personal visits. He approved many programs intended to improve the condition of the facility. He never turned down any request for money related to safety that we are aware of. He recognized the need for investment at TXC and increased capex and revex budgets.

However, he never came up with an investment strategy addressing the question of how to manage operational risks inherent at this site against a backdrop of constrained capital for the entire portfolio. He appears to have been unable to develop the right strategy for his SPU within the Group constraints and to properly develop his organization and establish a clear performance management structure. Particularly during the period between early 2002 and June 2004 the accountabilities of the different managers were disputed and unclear at almost every level. A document, called the "Blue Book" but without a date of publication (we believe it was issued post the incident) clarified the organizational structure in Refining, although there still

seemed to be disputes about reporting lines even in June 2006. In addition, it appears that notwithstanding some of the warning signals, he did not fully appreciate some of the risks identified in many parts of the site.

Mike was conflict adverse within his own leadership team, by among other things, leaving Don Parus in place against his own judgment. He also delegated performance reviews and QPRs to Pat Gower, while he nevertheless continued to hold the performance contract for Don Parus – a structure that contributed to management confusion and was inconsistent with BPMF principles. There was a clear standoff between Mike and John Manzoni resulting in Mike's isolation from the Segment's leadership team, which prevented him from creating strategic clarity as well as how to develop the SPU especially in light of the capex limitations. This isolation was also an impediment to John's familiarity with the Refining SPU's problems.

Mike was ineffective as a Group Vice President. He fostered a 'Fortress Refining' mentality in part by failing to have an effective relationship with his manager and shutting out other company resources. The team concluded from the interview that Mike blames 'BP' and his predecessors for the March 23rd disaster rather than considering his own accountability. No doubt, his predecessors took actions that resulted in a drastic need for infrastructure investment by the time he took over.

However, despite the warning messages in the 2002 AT Kearney report that the TXC Refinery was at serious risk from past management actions or inactions, he did not address the crucial issues including process safety management. Indeed, the "1000 Day Goals" initiated by Don Parus mainly progressed the integration possibilities within the South Houston complex. To the extent these goals had a safety component, that component focused on personal safety; management at all levels missed the significance of critical dimensions related to process safety (Mike was at the forefront of the management structure as an expert in refining and refineries). The gaps in BP's response became more evident when increases in capital spending did not prevent the serious incidents in 2004 which were precursors to the ISOM disaster.

We have concluded that Mike has not performed his duties effectively. His recent resignation from employment is consistent with the team's recommendation concerning his employment status.

b. Pat Gower, Regional VP, North America

Since October, 2003, Pat carried direct accountability as the Regional Vice President for US Refining. This included five refineries, with Texas City Refinery as the largest and most challenging facility, implicitly signaling that it should have been Pat's number one priority. Pat has substantial experience with refining generally, and at TXC in particular beginning as early as 1982. He understood the problems of under-investment at TXC Refinery and maintenance budget reductions; notably, he was TXC Refinery Maintenance Manager in 1999. He also understood the shift toward a culture of non-compliance and risk tolerance. He was (or should have been through his "kick the tires" unaccompanied walk-abouts) aware of critical symptoms such as unreported fires, leaks, emergency shutdowns, and reliability issues. Pat did not adequately appreciate the process safety implications of the dilapidated state of the TXC Refinery.

Despite the fact that in his judgment, Don was not a strong refinery leader, he failed to initiate the appropriate changes. He waited until January, 2005, to introduce Kathleen Lucas to strengthen the operational management at the Texas City Refinery (and then failed to give her adequate support).

Although Pat was aware of the serious condition at TXC from many reports, we found no evidence that Pat made Mike Hoffman adequately aware that TXC Refinery had substantial operational challenges exacerbated by a high tolerance for operational risk. Pat also gave the impression to the team that he acted as an observer rather than managing difficult reporting and governance issues. For example, he acknowledged that Don did not appreciate him as a supervisor and did not communicate with him, but in response, he did nothing directly with Don to mitigate this troublesome situation. He also does not appear to take appropriate accountability for the incident although he did not shy away from taking on the difficult task of representing BP before government agencies and others regarding the March 23rd incident.

It is the team's conclusion that Pat failed to actively control and supervise the performance of the most complex and difficult facility even in the face of alarming reports and findings, and the severe precursor incidents in 2004.

c. Don Parus, Texas City Refinery BUL

Don became the TXC Refinery BUL in June 2004 encompassing complete responsibility for the Refinery. Prior to this role, Don was the South Houston Integrated Site (SHIS) Director since 2002. Don has a solid professional background, which includes refining technical and managerial experience as well as having held functional positions in procurement and refining strategic planning. He was closely involved in the Veba deal and consequently had detailed knowledge of the Gelsenkirchen refinery which is considered a best in class benchmark within BP's refinery portfolio. This refinery, though smaller, is structurally comparable to the TXC refinery and was the subject of an AT Kearney study familiar to Don.

As the new SHIS Director, Don immediately recognized in 2002, the need to conduct a detailed study of the TXC Refinery modeled along the lines of the AT Kearney/Veba Report. One of the report's conclusions, "Asset safety is one of the biggest issues identified. There were serious concerns about the *potential for a major site incident* due mainly to the very large numbers of hydrocarbon escape [over 80 in the 2000 – 2001 period]", illustrated an important aspect of the TXC Refinery situation. The fundamental issues identified in the AT Kearney report (lack of investment, inadequate technical competence, lack of compliance, and lack of proper prioritization) were also substantiated in several other reports including the gHSEr audit and subsequent report led by Rick Porter in 2003; the CoW audit in May 2004; the Telos Report in late 2004/early 2005, and subsequently the Mogford report issued after the incident.

Don started several initiatives: he arranged for weekly site visits by the management, he initiated piping integrity project intended to stem hydrocarbon releases, and he championed increased capital spend. From what we can discern, the general view of Don and other managers was that the piping project would address many of the issues arising from hydrocarbon releases. Other safety initiatives focused upon – and effectively reduced – the rate of lost time and reportable accidents. Don also began an extensive education effort within TXC about the prior history of fatalities after the 2004 accidents. He deserves significant credit for all of the things he did. However, when it came to process safety and despite the warning in the

AT Kearney/Veba Report and others, and even after the March 2004 fire, he did not appreciate the increasingly critical issues related to process safety, but rather continued the emphasis on personal safety and other measures.

Don also failed to give clear messages about the seriousness of the issues at TXC Refinery. He did not address important issues such as process safety and risk tolerance when giving presentations to senior leaders, including Pat Gower, Mike Hoffman, and John Manzoni.

In the team's judgment, he spent a substantial (and perhaps disproportionate) amount of his time focused on the external environment and internal activities such as the Innovene separation. While one might justify those focused areas prior to June 2004 when he held the site director position, it is difficult to understand why he did not change his direct focus in-line with a Refining BUL once he became the BUL for Texas City Refinery. There was a standoff between Don and Pat Gower and the invariable result was that Don did not receive or request appropriate support.

Recognizing the complexity of the TXC Refinery situation and the lack of support from senior management, it is tempting to conclude that Don was on a mission impossible, and that he did not get adequate support from his principals. However, we have concerns about Don's effectiveness as a leader, evidenced by his lack of prioritization and his inability to ask for help in finding solutions to his problems. Don did not generally consult much with Gower or anyone else outside Texas City on refining issues and he seemed to prefer acting like a CEO rather than a "hands-on" refining BUL. Further Don's responses to the 2004 fatalities at TXC Refinery, while attention-getting, were not properly balanced by effective leadership and action to avoid re-occurrence.

Don takes clear accountability for the March 23 tragedy and expressed remorse and contrition. However, while the team identified several mitigating factors, it is our conclusion that Don failed to adequately carry out his accountabilities from a management perspective.

d. Willie Willis, Manufacturing Delivery Leader (MDL), West Plant

Willie was responsible for the West Plant from September 2003 and assumed responsibility for the ISOM unit in September 2004. Willie's career began at the Cherry Point Refinery in 1979 as an operator and gradually progressed to leadership positions. It is our understanding that at the time of the incident, Willie was named as a succession plan candidate for senior refinery leadership roles including a group leader role, notwithstanding that he does not have any formal technical education qualifying him for this job. Despite his lack of technical expertise, he knew that a lack of compliance, apathy, and poor plant conditions among other things were problems at the Texas City Refinery site.

When Willie took on the ISOM unit in September 2004, he rejected several offers for detailed handover, which perhaps could have heightened his awareness of issues from past start ups. Because of his experience, Willie could identify some of the issues that the ISOM unit presented; however, he failed to check the competencies of the people in his organization. As the MDL for the West Plant, Willie was accountable to ensure that his managers carried out a unit start-up following proper procedures; that the roles and responsibilities of those engaged in operations were clear; that the right people were in the right job; and that there were no issues of excessive overtime. In the view of the team, these accountabilities were not adequately carried out. With regard to overtime, some or most of the individuals involved in the start-up

had been working continuous days for several weeks, 12 hours per day as noted in the Mogford report.

Moreover, other troubling aspects of Willis' managerial style are the unintended consequences of the 'Willie Willis Way'. The 'Willie Willis Way', i.e., creating his own set of rules and procedures for which he was well-known, were lauded by others at the refinery. However, this approach ultimately led to operational breaches including such things as lack of clarity around the rules for step-up supervisors, not having proper handovers, and not following the start-up procedures.

Willie accepted accountability for the incident and expressed remorse and contrition. It is also apparent that he should not have been placed in an MDL role as he lacked the requisite technical and strategic competencies. However, in areas in which he was competent, he failed to appropriately perform his duties as a manager.

In conclusion, there are substantial mitigating considerations for Willis including his lack of technical and educational background and the short tenure of his responsibility for the ISOM unit. However, he was in charge of the unit when this tragic accident occurred and perhaps more than others he understood the risk taking culture that was so prevalent at the TXC Refinery. It is the team's conclusion that overall, Willis did not properly carryout his management accountabilities.

VI. Observations and Recommendations

At the request of the senior executive sponsors, we have in a brief format identified in this section some of the significant observations we made about BP Group matters, the overriding culture aspects so prevalent in analyzing management accountability, and finally about the Texas City Refinery itself. These observations simply reflect what we saw as substantial factors that either influenced management or were the consequences of various management processes.

We have also taken the liberty to submit some high-level recommendations in response to these observations. We note that some of these observations parallel both the Mogford Report and the Baker Panel Report, nevertheless, we independently observed them and believe that senior BP management should be aware of these points. Moreover, it is possible that some actions are already underway consistent with these recommendations. Further conversation by senior leaders about these observations is recommended.

OBSERVATIONS	RECOMMENDATIONS
GROUP	
1. BPMF	
BPMF was communicated and understood but ignored to a large extent	• Each Group leader has to respect that "The Group Comes First" • BPMF needs to be operationalized throughout organization to first line leaders • Processes are needed to optimize the interfaces between Segment, Region, and Functions • Correspondingly, rules of engagement need to be created to insure accountabilities are understood
2. Strategy	
a. The R&M Segment strategy did not define the long term goals for Segment, Functions and Region	• Segment strategies need to identify and to build upon a desired portfolio for maximizing the long term benefit of the Group • Funding requirements must be identified separately for the purpose of: a) staying in business safely and b) capturing opportunities to grow
b. Strategy for Refining SPU was inadequate in the light of capital constraints	When funds are constrained and not all requirements can be met, the SPU (and not the business unit) must set adequate priorities for allocating funds and must propose appropriate actions (including asset divestitures)
3. People Management	
a. Evidence of incompetence within R&M organization (wrong people in jobs, promotions not based on qualification, job requirements not clear)	Senior management actions must, in fact, be consistent with our guidelines, i.e., that the right people are in the right jobs based on transparent selection processes that consider job requirements, track record and qualification for the job
b. Lack of consistent recognition of functional excellence in the R&M organization	A process is needed to verify that functional input is received and respected, and that disagreements are resolved at the appropriate (i.e. higher) Segment and Group levels
4. Audits	
Multiple and sometimes overlapping audits without response, not sent to right audience for action, and lack of respect for audit findings	• Prioritize audit requirements • Create a corresponding schedule • Audit findings must be presented to unit leader and his/her boss and Function/Region if appropriate. • Must have a prioritized action plan for implementation of audit findings with milestones • Regular follow-up reports

OBSERVATIONS	RECOMMENDATIONS
5. Lack of senior management presence at critical times in TXC	• Regular field trips to major operations by senior management should be required in situations comparable to events that occurred at TXC in 2004 indicating a need for action. • Senior management presence underlines commitment to safety; hence visits should include not only Segment leaders, but also Function and Region leaders (GVP Refining; GVP R&M HSSE and Technology; GVP Safety and Operations, GVP Region) • Visits must include deep dive reviews -- systemic and integrated, addressing the important problems and issues
6. "Steers" from London were understood as "orders"	Challenges must be clearly stated as challenges to ensure a constructive debate within management of both opportunities and risks
CULTURE	
1. Stand offs	
The process of delegation was dysfunctional due to standoff relationships from TXC Refinery Management up to the CEO, R&M Segment	Stand offs must not be tolerated; these are clearly impediments to business delivery
2. Fortress	
Fortress environments at TXC and the SPU level	As "The Group Comes First", each unit (Segment, Business, Function, Region) must behave as a part of the Group in alignment with "neighboring" businesses, functions and Region to create congruent outcomes
3. 'Mavericks' (a breakaway from the status quo)	
There was a high-tolerance for mavericks who acted more in the interest of expediency with little regard for operational procedures	• Breakaways can be acceptable, and even desirable, but only if transparent and after being challenged with respect to all other interests at stake • Management self-discipline is required
4. Operational daily handovers	
No clear management expectation for routine daily operational handovers (evidenced by events on March 23, 2005)	Rigorously documented handover to be signed off by supervisor should be the required norm

OBSERVATIONS	RECOMMENDATIONS
5. Management transitions	
Management transitions were exacerbated by high level of turnover Examples: - Rick Peltier to Willie Willis - Rick Hale to Don Parus - Al Kozinski to Mike Hoffman - Doug Ford to John Manzoni	• Management actions must, in fact, follow the practice that everyone is familiar with: management successors need to be fully aware of past issues and actions relevant to new assignments, and progress must be properly documented and signed off by supervisors • Managers of complex organizations should stay in post three to five years to ensure - continuity - consistency - unambiguous accountability for the consequences of their decisions
6. Lack of corporate memory Examples: - Little awareness of similar previous events at ISOM - It took a special effort by Don Parus to discover the record of casualties at TXC over the last thirty years	Given a similar finding in the Baker Panel report, a user friendly management information system tool that captures all incidents and near misses with prioritization should be developed
7. Performance management systems were broken	
a. Unclear minimum expectations for significant leadership roles	• Do not create expectations simply by building upon someone's past experience, but by benchmarking with best industry performer and neutral standards • Determine the time frame for remediation and the ensuing consequences.
b. Preference for short term gains rather than strategic long term benefits	While annual performance contracts are required to deal with ongoing risks, the annual goals must also be balanced and aligned with medium and long term goals of the unit
c. Performance deficiencies were not adequately addressed; apparent gaps in performance were addressed with span breakers (Example: Kathleen Lucas for Don Parus)	When serious gaps in performance are evident, it is the manager's responsibility to address them and, if necessary, to replace the individual

OBSERVATIONS	RECOMMENDATIONS
TEXAS CITY REFINERY	
1. De-motivated workforce	
a. Evident in the Telos Study (workforce wide dissatisfaction)	a. A workplace must be created where: • goals are clear • promises are kept • apparent deficiencies and failures are addressed openly with schedule for remediation b. Transparent HR and personnel management policies based on meritocracy must be enforced
b. Evident in the interviews with TXC leaders, first line, MDLs, etc.	BPMF must be operationalized (accountability with corresponding delegated authority; no by-passing)
2. There was a lack of recognition for hard work of the leadership team for the recovery effort after the March 23 disaster	Refining SPU and TXC management should consider appropriate rewards and recognition, which could include a reconciliation process
3. Ineffective relationship between Union and Company attributable to both parties	
a. Disconnect between Don Parus and first line leaders when Don actively undermined the process of an orderly grievance system by taking the authority away from first line supervisors and by direct negotiation with union leaders	BP leaders must respect agreed process with Union in all matters and not bypass their direct reports, i.e. first line leaders, and the accountable HR-function
b. Lack of common understanding of long term goals	• Develop a proper strategy to ensure union and management are clear – and aligned – about the actions required to achieve long term goals with particular reference to HSSE • Relationship with contractors requires profound improvement
c. Fundamental misconception that personal relationships with individual union leaders could overcome the natural conflict between the company and Union	• Reinforce role of managers to create an environment of trust (which is always defined by keeping promises and transparency) • Managers must respect the agreed procedures

OBSERVATIONS	RECOMMENDATIONS
4. Overtime	
History of accepting high levels of OT; during turnarounds, there is a tendency to work extensive consecutive 12 hour days	Threshold for level of overtime must be defined on an individual basis for persons in safety-sensitive positions
5. Presentations and communications did not completely reflect reality	
a. Environment of good news presented in the first place; preference over bad news	Bad news and issues should be presented unambiguously at the beginning of presentations
b. Failure to consistently reveal the dilapidated state of the physical assets	Presentations should be verified by field trips
6. Striking emphasis on commercial accomplishments relative to focus on asset improvement and process safety	Safety always needs priority over financials and commercial, including during presentations
7. Boiling frog syndrome was evident at TXC	
Examples: - There was a reported fire on site on average every week - "Broken windows" problem	• Each manager needs to benchmark the performance of his/her unit regularly against best practices in the industry, and not against his/her past experience • Rigorous reporting of events, failures and near misses must be the norm, enforced by performance contracts and assessments
8. Lack of compliance	
There was high level of tolerance for lack of compliance for routine daily operations	"Discipline and rigor" need to be corporate values, and then instilled through all levels of management

Matrix

Accountability Matrix for Final Report

Never forget: 15 people killed, 170+ hurt badly

Name	What aspect of this person's job related to the incident?	Did this person have the necessary information to adequately perform his/her role as they relate to the incident? If not, did he/she seek that information? Or could he/she have sought it?	Did he/she act appropriately on that information? Did he/she set Right Priorities? Mitigating Factors Aggravating Factors	Outcomes (in no order of significance for all individuals): 1. Lack of competency 2. Inattention 3. Poor Judgment 4. Failure to perform duties 5. Other
Willie Willis	Responsible for West Plant, including ISOM. [1]	• Not clear whether he had full technical understanding; the competencies for his role were not listed on his job description. • Yes, Willie did know about the state of the plant; however, he did not have a deep technical background. [2] • No proper handover for ISOM unit (he did not accept the offer of a handover though Rich Peltier offered several times). [3] • He did not investigate the competency of Ray Hawkins, Charlie Logan, others. [4] • He did not check adequate vocational training of ISOM crew (Warren Briggs!) • Sloppiness on the MOC for trailer citing. [5]	No -- He failed to take over from Peltier properly, he did not recognize the ISOM unit performance issues and therefore could not act appropriately on that information. -- He did not set the right priorities. -- He did not clarify expectations for work on the ISOM unit. -- He did not hold his team accountable. [6] <u>Mitigating Factors</u> • The TXC site overall was blind regarding the location of the trailers. [7] • He put safety as a priority as indicated by his message to Ray Hawkins that he should not be constrained by the budget for a safety matter. [8] • Expressed contrition during interview – demonstrated a	• Other: Should not have been placed in MDL role as he lacked technical and strategic competencies. • Failure to perform duties: In areas in which he was competent, he failed to appropriately perform duties as a manager.

Accountability Matrix for Final Report

Never forget: 15 people killed, 170+ hurt badly

			genuine concern over what happened. [9] • Questionable whether he had the adequate qualifications for the job. • Placed in a job without technical education; there was no challenge given about his background for the job. [10] • Supported the emphasis on piping inspection from the March 2004 Ultra cracker fire. [11] • Started the West Plant roles and accountabilities project. [12] • Stressed importance of technical procedures, etc. [13] <u>Aggravating Factors</u> • Had ultimate responsibility for ISOM start-up ; unable to provide clarity about when and how the start-up decision was made, and how and why personnel were scheduled to work on the start-up. • Despite his lack of technical expertise, he knew that lack of compliance, apathy, poor plant conditions among other things were problems on the site – however, the "Willie Willis way" gave a dual message since he created his own set of rules. [14] • While accepting accountability, he also asserts that overall TXC leadership is accountable for	

Accountability Matrix for Final Report

Never forget: 15 people killed, 170+ hurt badly

			incident. [15] • Does not appear to have tried to learn as much as he could at the handover about performance issues in his remit. • He sought to justify the decrease in the maintenance budget for 2005 for the West Plant by saying he would just ignore this and spend the money anyway. [16]	

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Kathleen Lucas	Responsible for overall safe operations of the refinery.	• In a relatively short period of time, she gathered a substantial and accurate body of knowledge and she took some action, for example: hiring twelve inspectors. • She was aware that units were rundown and that certain behaviors had not changed since she left in 1995. • Active in gaining hands-on knowledge. • Aware of the warning signals. • Apparently no proper briefing about the overall situation at the refinery.	No, she did not ring the alarm bells sufficiently to Hoffman, Gower, and Parus. She did not recognize Willie Willis' deficiencies even after March 23. <u>Mitigating Factors</u> • In post only since mid-January 2005. • Her role was not clearly defined. • Parus did not want her as Operations Manager. • Parus bypassed (and eroded) her role by dealing with MDLs directly. • Upon the departure of Parus, she assumed the role of making discipline decisions and removed some incompetent individuals from their roles. • She has worked hard (with little recognition) to bring TXC back from an operating stand point.	• Other: Too short in post to have an impact on culture.

Accountability Matrix for Final Report

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Name	What aspect of this person's job related to the incident?	Did this person have the necessary information to adequately perform his/her role as they relate to the incident? If not, did he/she seek that information? Or could he/she have sought it?	Did he/she act appropriately on that information? Did he/she set Right Priorities? Mitigating Factors Aggravating Factors	Outcomes: 1. Lack of competency 2. Inattention 3. Poor Judgment 4. Failure to perform duties 5. Other
Pat Gower	Carried direct accountability as RVP for TXC Refinery since October 2003 with Hale, BUL; beginning 3Q '04 with Parus, BUL. [1]	Yes – he had extensive information and experience with TXC Refinery over the years, in particular as maintenance manager in 1999. Substantial experience in refining generally. [2] According to Don Parus, he walked around in the refinery on his own many times. [3]	No. <u>Mitigating Factors</u> Did not shy away from taking on the difficult task of representing BP before government agencies and others regarding the March 23rd incident. [4] <u>Aggravating Factors</u> • Did not take appropriate action although informed about the bad performance of the refinery (i.e. Rick Porter's gHSEr-report 2003). [5] • With his substantial knowledge and experience, did not challenge Don Parus for the unvarnished facts nor did he sufficiently convey the seriousness of the issues. [6] • Did not act on incidents like recurring fires and the 2004-events. [7] • Does not appear to take accountability for the incident. • While acknowledging Don	• Failure to perform duties. • Failed to lead consistent with his level in management. • Arguably failed to adequately manage performance of direct report, TXC BUL.

Accountability Matrix for Final Report

Never forget: 15 people killed, 170+ hurt badly

			Parus' shortcomings, he insufficiently addressed the problem by placing Kathleen Lucas as a "span breaker" and then only half-heartedly supported her. [8] • He did not accept full responsibility for the Refinery; nevertheless, he insisted the Refining "blue book" correctly set forth his accountabilities which included responsibility for such operations. [9] • Shows a distinct tendency to be an observer rather than proactively managing difficult reporting and governance issues. [10] • Appears to have accepted the "stand off" between Don and himself over roles and accountabilities; later, did not seek clarity, not even when Colin McLean had taken over. [11]	

Accountability Matrix for Final Report

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Name	What aspect of this person's job related to the incident?	Did this person have the necessary information to adequately perform his/her role as they relate to the incident? If not, did he/she seek that information? Or could he/she have sought it?	Did he/she act appropriately on that information? Did he/she set Right Priorities? Mitigating Factors Aggravating Factors	Outcomes: 1. Lack of competency 2. Inattention 3. Poor Judgment 4. Failure to perform duties 5. Other
Mike Hoffman	Dual role: 1. Line accountability for Refining in the Segment, including PSM. [1] 2. HSSE tag for R&M Senior Executive Team.	Yes, he had substantial knowledge about the distressed state of TXC Refinery as there were many warning signals available to him. [2] He had deep knowledge of refining. [3]	No. • Did not give the right signal to the organization by responding immediately with personal visits when fatalities and ultra former fire occurred in 2004. [4] • Did not demonstrate his commitment to turn the Refinery around by regular field trips (see TXC-presentation to him in Houston, not in TXC, even in Feb.2005!). [5] • Did not push organizational clarity; promoted reporting relationships that hindered performance management; hence the information flow was not systematic and he did not effectively manage performance. [6] • Did not appropriately inform John Manzoni and SET regarding the performance of TXC. [7]	• Failure to perform his duties.

Accountability Matrix for Final Report

Never forget: 15 people killed, 170+ hurt badly

			• Although he disagreed with Doug Ford's and Al Kozinski's decision to move Don Parus to BPSH in 2002, he did not take any effective action to either manage his performance or to replace him. [8] • Struggled with setting priorities: he recognized the need for investment, but may not have adequately balanced with competing commercial needs. [9] • Recognized that major investments were needed in the Refinery; however, did not clarify how the Refinery should cope with budget limitations for capital and did not apply sufficient urgency to the situation. [10] • Did not respond adequately to PSM challenge, in particular after the 2004-incidents although TXC arguably is BP's most important refinery. [11] • Understood that personal safety was not always the appropriate focus for Refining (e.g., the driving standard), but was ineffective at promoting process safety or otherwise reorienting R&M	

Accountability Matrix for Final Report

Never forget: 15 people killed, 170+ hurt badly

			safety priorities. [12] Mitigating Factors • Neither Group nor Segment had clearly defined strategy for Refining and both had low regard for refineries. • Placement of Kathleen Lucas (but only supported halfheartedly). [13] • Desired to make TXC a safe place and fully supported the agenda submitted by TXC management (broken windows, 1000 day goals, piping integrity, capital investment, etc.). [14] • Inherited a facility that had not been adequately maintained and without sufficient reinvestment for quite some time; supported and to some extent led efforts to improve the facility. [15] • Made some necessary personnel changes at TXC (Carter). Aggravating Factors • Somewhat of a "know it all" attitude; expresses a disdain for "BP" despite being a GVP and a senior leader; blames BP for issues he is accountable for.	

Accountability Matrix for Final Report

Never forget: 15 people killed, 170+ hurt badly

			• There was a 'stand off' between he and Manzoni concerning the running of refining. [16] • As a consequence, Manzoni did not direct his attention to refining, and he had a free reign, but not a blank check. • Does not immediately acknowledge any accountability for the March 23rd incident. [17] • Critical of Mogford report; -- "Mogford report is hear say and reaches unsubstantiated conclusions, I don't agree with it." [18] • Fostered a 'silo' organization – very loyal only within his own organization. [19] • Conflict adverse within his own organization – left people in position against his own judgment. [20] • Distinctively out of step with Segment senior leadership and fostered a negative sub-culture in the Refining SPU. • Recognizing that limited capex funds would affect refining, asserted BP should have sold or shutdown refineries, but did not follow through. [21]	

Accountability Matrix for Final Report

Never forget: 15 people killed, 170+ hurt badly

Name	What aspect of this person's job related to the incident?	Did this person have the necessary information to adequately perform his/her role as they relate to the incident? If not, did he/she seek that information? Or could he/she have sought it?	Did he/she act appropriately on that information? Did he/she set Right Priorities? Mitigating Factors Aggravating Factors	Outcomes: 1. Lack of competency 2. Inattention 3. Poor Judgment 4. Failure to perform duties 5. Other
Don Parus	BUL, TXC Refinery June 2004 – May 2005 Responsible for TXC Refinery site. [1]	Yes, he did have the necessary information. Among other things, evidenced by the following: 1. In 2004, TXC Refinery had three fatalities (two incidents) and a serious fire. His presentation to the R&M SET identified some of the root causes that were later confirmed in the Mogford report about the ISOM incident.[2] 2. Telos report which he requested to confirm what he already knew about the site; (late 2004).[3] 3. Handover with Rick Hale (June 2004).[4] 4. Previously, as the South Houston Integrated Site (SHIS) Leader, he received strong warning signals from multiple sources that TXC Refinery had operational issues that could affect safety including: [5a] • gHSEr led by Rick Porter, 2003 • AT Kearney Report, 2002 • COW audit May 2004 • Other [5b]	No, he did not act appropriately on the information. It appears that he understood some critical aspects of the problem, such as a culture that took risks as well as the tolerance for a lack of compliance; but he did not grasp the gravity of these issues at TXC Refinery, and as a result, he did not set the right priorities. • No systemic interventions. • Inconsistent communication. • Mixed messages – wrong conclusions and wrong priorities.[6] <u>Mitigating Factors</u> • Recognizing the need to improve safety at TXC Refinery, he started several initiatives, including [7] 1. Re-starting face:face training. 2. Full time auditors and increased the number of	• Poor judgment

Accountability Matrix for Final Report

Never forget: 15 people killed, 170+ hurt badly

			inspectors. 3. 1000 day goals. 4. Just culture. 5. Piping integrity project • He did not get the appropriate support and direction he needed from senior leaders.[8] • There was a 'stand off' between himself and Pat Gower. As a result, he did not get the appropriate support from Pat Gower to assist in setting the right priorities despite the fact that Pat intimately knew the TXC Refinery site.[9] • The SPU had identified that there was a delivery issue with the plan because TXC Refinery had a disproportionate capital burden. SPU could not afford to devote nearly 20% of its capital in TXC – Nov 2003 bilateral.[10] • Process safety management and plant integrity did not get the adequate attention from the Refining SPU. [11] • Did not tell anyone to cut safety related items or jeopardize the safety of the kit; looked at other places to make cuts (e.g., change house). <u>Aggravating Factors</u> • As SHIS Leader from April 2002 to June 2004, he had complete	

Accountability Matrix for Final Report

Never forget: 15 people killed, 170+ hurt badly

			access to information and the opportunity to act earlier on the issues identified, such as PSM, compliance, safety culture, etc.[12] • Spent substantial time focused on external matters (Innovene, for instance); he is apparently more comfortable in those areas.[13] • He did not create a focused action plan to respond to the recommendations concerning process safety, although concerns over PSM were delivered several times.[14] • Did not press the issues of the inherent safety culture problems when giving presentations to senior leaders: Gower Hoffman, and Manzoni.[15] Believed he was making progress as he verified with improved KPI's on personal safety only. • He did not seek help outside TXC for solutions on PSM and plant integrity issues. [16]	

Appendices

Willis

Appendices to Accountability Matrix for Final Report

WILLIE WILLIS		
Ref. No.	**Background Documents**	**Page Nos.**
1	Texas City accountability Project Major Milestones – July 21, 2006	2, 3
	Deposition of Willie Willis – December 14, 2005	
	– Description of accountabilities as LT members and West Plant MDL	13-14
	– Timing of West plant and MDL appointment	38
	– Organization and accountabilities of Willie Willis	50-51
2	Interview Summary of Willie Willis – June 8, 2006	
	– General background and training overview – no formal training	1, 2
	Deposition of Willie Willis – December 14, 2005	
	– Review of previous incidents Willis was aware of before the tragedy	59
3	Interview summary of Willie Willis – June 8, 2004	
	– The handover from Peltier was not structured…	4
	Deposition of Willie Willis – December 14, 2005	
	– Description of handover process, i.e., discussion w/Ray Hawkins	39
	– Capacity analysis of blowdown stack sub modifications (not done?)	194
	– Review of previous incidents in ISOM Willie was not aware of	209-211
	– Description of handover process with Bob Smith	218-219
	– Q: Have you ever looked at the 1998 Hazop A: No Sir Q: Have you ever looked at the MOC to rerate the splitter A: Not with any detail	221-223
	– Knowledge of previous start up history, not existing	290
	JIIC interview of Willie Willis – September 9, 2005	
	- November 2004 took over from Peltier…went through an MOC process	3
	- OCAM – training in the west plant and actions Willie took	3-4
4	Interview summary of Willie Willis – June 8, 2006	
	– Willis knew his superintendent's (Hawkins) capabilities…but did not look underneath. Willis did not know ISOM supervisor was not qualified	4
	JIIC interview of Willie Willis – September 9, 2005	
	– Job posting of shift supervisors -- Willis didn't know where they came from; didn't ask	23
5	Deposition of Willie Willis – December 14, 2005	
	Lack of clarity on trailer siting and who is accountable (not Willie?)	156-157

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WILLIE WILLIS		
Ref. No.	**Background Documents**	**Page Nos.**
6	Interview summary of Willie Willis – June 8, 2004	4, 6
7	Interview summary of Willie Willis – June 8, 2006 – There was a tolerance of risk in TXC – Willis did not know who was accountable for the placement of the trailers	 3 8
8	Interview summary of Willie Willis – June 8, 2006 – Willis continued to tell Hawkins to do the right thing…he would take care of the budget…	 4
9	Interview summary of Willie Willis – June 8, 2006 – Willis is dedicated to stay at TXC – What Willis would do differently Deposition of Willie Willis – December 14, 2005 – Expressions of accountability and regret	 2 8 238-242
10	Interview summary of Willie Willis – June 8, 2006 – Description of background and training Deposition of Willie Willis – December 14, 2005 – Willis CV – Training and education review with focus on MDL job and PSM – Wharton college education (business only) – Muddled discussion about safety critical equipment? – Q: You are not an engineer are you A: No…discussion about design intent of relief systems	 1, 2 20-31 34-38 124-125 177-180 188-191
11	Interview summary of Willie Willis – June 8, 2006 – Willis was most concerned with piping integrity …discussion with Parus Deposition of Willie Willis – December 14, 2005 – Part where thinning pipe was a TXC problem played down if not dismissed.	 3 265
12	Interview summary of Willie Willis – June 8, 2006	6
13	Deposition of Willie Willis – December 14, 2005	99

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WILLIE WILLIS		
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14	Interview summary of Willie Willis – June 8, 2006	
	– Willis agreed to step up Tenhaaf to keep him happy. The practice has been to work straight through a TAR…	7
	Deposition of Willie Willis – December 14, 2005	
	– Recognition of non-compliance	41-45
	– Detailed list of non-compliance activities that resulted in the tragedy on Willis' watch.	101-123
	– COW audit, ESI, traction, Telos signals of non-compliance; low morale environment were clear to Willis	259-267
	– I started to do my own ESI audits on a quarterly basis	255
	JIIC interview with Willie Willis – September 9, 2005	
	– Willis expectations concerning the front line leader (quarterly conversations)	5
	– Willis expectations versus the superintendent/score card/(quarterly conversations)	8
	– Step-up process…(or lack of rules)	10-14
	– Charlie Logan and training, Willis had hardly any contact and no clear idea about Charlie's activities	20
	– Management style (walk about, chat, etc). How do you check compliance?	27
15	Interview summary of Willie Willis – June 8, 2006	
	– Parus did not hold people accountable	6
	– Willis states that safety starts at the top…	8
	Deposition of Willie Willis – December 14, 2005	
	– Accountabilities for equipment upgrade and capex spent is with LT TXC	126
	– Q Who owns the raffinate splitter A That would be me…and discussions about an ESD system.	135-139
	– The PSA process let us down.	160
	Q: PSA who is responsible for the process - A: The LT	160
	– There is not an effective system in place nor the behaviors to report process upsets … nor were upsets properly investigated … Question about cognizance of MDL, superintendent and supervisor	286-288
	– Performance review of Willis versus 1000 day goals. An action item closure/B on RFI? Fatalities were apparently ignored in the scoring?	294
	JIIC interview of Willie Willis – September 9, 2005	
	– Union relationship position versus individual testing	15
	– There was no training budget at unit level	18

Appendices to Accountability Matrix for Final Report

WILLIE WILLIS		
Ref. No.	**Background Documents**	**Page Nos.**
16	Deposition of Willie Willis – December 14, 2005	
	– Description of the VEBA assessment and the 1000 day goals	30-31
	– Q: You were aware of many of the problems before the explosion A: Yes sir	298
	Interview summary of Willie Willis – June 8, 2006	
	– Everyone at the plant knew the underlying issues…PSM was missing from the agenda…Willis was most concerned with piping integrity…	3
	– Apathy is the key word for the culture	4
	– The employees were not competent to do the job on March 23…Willis thought the supervisor was competent to run the job	5
	– Willis does not believe that TXC dealt with risk properly…etc.	6
	Other documents of interest: 1. Performance appraisal 2003/Pat King, Rick Hale Highlights: Description of transformation activities. They focused initially on absenteeism (report in cooperation with HR), broken windows, digital business (saving of $3M), security (fraud abatement), warehouse, redeployment. Strategic initiatives resulting in five teams and 50+ recommendations. Pat King is a Willie fan. Willie connects well with people. Good report with the Union at all levels. Although the condition of the infrastructure and process was not up to his standard, he still found things to compliment people on, then he went through items of improvement. While Rick liked his management style, he was not sure it translated into the levels of improvement that he wanted to see in the west plant. Continuing availability and safety problems have haunted Willie since he took over. 2. Performance appraisal 2004/Don Parus Highlights: Area has shown signs of significant recovery… tremendous potential and charismatic leader…mention of the tragic event and personal impact.	

Gower

Appendices to Accountability Matrix for Final Report

PAT GOWER		
Ref. No.	**Background Documents**	**Page Nos.**
1	Interview with Gower Deposition, Gower	2 – 3 24 - 26
2	Interview with Gower Deposition, Gower	1 – 2 78-79
3	Interview with Parus	5
4	Interview with Pillari Interview with Gower	4 5-6
5	Interview with Gower	4
6	Interview with Gower	11
7	Interview with Gower	4
8	Interview with Gower	4-5
9	Interview with Gower Initial refusal to provide further information on roles and accountabilities in the June 27, 2006 e-mail from Bill Bonse	10-11
10	Deposition, Gower Initial refusal to provide further information on roles and accountabilities in the June 27, 2006 e-mail from Bill Bonse	82
11	Interview with Gower	4, 6

Parus

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DON PARUS		
Ref. No.	**Background Documents**	**Page Nos.**
1	Interview summary of Don Parus April 28, 2005	
	– Current title is site director TXC…June 13th 2004	2
	– (I have) complete responsibility for the refinery	3
	Deposition of Don Parus June 22, 2006	
	– Yes I was the top guy at the site in March 2005	16
	– Did you have the power to shut down the plant….yes	28
2	Interview summary of Don Parus October 12, 2006	
	– He asked how many fatalities…only when he had the first fatality in May 2004	6
3	Interview summary of Don Parus October 12, 2006	
	– The site had an apparent safety risk issue	9
	– Parus was not shocked by the comments	9
	Deposition of Don Parus June 22, 2006	
	– I didn't find the Telos report shocking ….	75
	– It reinforced we had a safety culture problem	76
	– There is an exceptional degree of fear of catastrophic incidents at Texas City	170
	– Telos reinforced things we were looking at	194
4	Interview summary of Don Parus October 12, 2006	
	– Parus did not know a number of things until Hale left	6
5a	Interview summary of Don Parus October 12, 2006	
	– TXC was a run down refinery ..this resulted in him having ATK conduct a study…	3
	– The TXC study revealed that the process units were not maintained	3
	Deposition of Don Parus June 22, 2006	
	– Risk and compliance were common (amongst several reported	139
	– ATK…There are serious concerns about the potential for a major site incident	164
	– ESI audit "Quit waiting for a possible unit disaster …before correcting the problem…	168
	– ATK...there is a backlog of overdue inspections	191

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DON PARUS		
Ref. No.	**Background Documents**	**Page Nos.**
5b	Interview summary of Don Parus October 12, 2006	
	– He thought the site had decayed	3
	– TXC was in complete decline	3
	Interview summary of Don Parus April 28, 2005	
	– Every week … do a 90-minute safety audit	6
	– It was piping that would keep me awake at night	15
	Deposition of Don Parus June 22, 2006	
	– … the plant had been underinvested …	43
	– … there were things that were deferred … yes	44
	– Monday we went out as the leadership team and spent 2 hours at a unit	49
	– HSSE Business plan. TCS kills somebody in the next 12/18 months	173
6	Interview summary of Don Parus October 12, 2006	
	– Bonse stated that ATK gave a strong warning that TXC was not a safe place …Parus responded he did not get that interpretation	4
	– Bonse said that McLemore indicated there was one fire a week.	5
	– Parus did not focus on the number of fires	9
	– Parus was aware of the 12-hour shifts but not their duration	12
	– Parus did not pick up anything on trailer sitings	12
	– Parus interpreted the ATK report as a need for training …not employees not qualified	13
	Interview summary of Don Parus April 28, 2005	
	– Viewpoint was, all points touched, were heading in the right direction…etc.	7
	Deposition of Don Parus June 22, 2006	
	– Safety, you can look through many lenses	24
	– …I thought we were making significant progress	60
	– Telos…in the very recent time period safety was improving at the site…	75
	– I'm not aware of the number of fires…	146
	– The site thrives on train wrecks…	188
	– Need to clearly demonstrate a tougher position …on specific operational issues	190
	– Telos…I looked at it through two lenses	240

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DON PARUS		
Ref. No.	**Background Documents**	**Page Nos.**
7	Interview summary of Don Parus October 12, 2006	
	– He moved toward face to face training…	9
	– Parus was trying to raise the status of the FLL	11
	– TXC went to the just culture model	12
	Interview summary of Don Parus April 28, 2005	
	– Description of actions taken ..	9-10
	– Just culture	10
	– 4 full time auditors	13
	Deposition of Don Parus June 22, 2006	
	– Description of actions taken...	83-86
	– ...training delivery	100-101
8	Interview summary of Don Parus October 12, 2006	
	– Hoffman talked about the budget with Hale without Parus being present	4
	– The response of Hoffman and McKenzie was good but no action.	5
	Parus presented…that TXC was underinvested to Manzoni …no reaction	7
	– Tony Meggs and Greg Coleman got the story	7
	– All of his efforts fell on deaf hears	7
	– Parus was very upset that Hoffman did not make the visit to TXC	10
	– He was on a mission impossible	13
	– Parus told Manzoni his job was overwhelming –Manzoni said nothing	13
	Deposition of Don Parus June 22, 2006	
	– Communicated clearly there were 5 problem areas	119
	– John Manzoni made a 2 day visit…	119
	– John is not an experienced refiner…don't know what his observations were	129
	– John Manzoni did not challenge the statement on underinvestment	134-135
	– COW report was shared with John Manzoni	139
	– COW audit report was sent directly to John Manzoni who commissioned it	151-152
	– There is a strong sense that Parus's commitment shown...is undermined by lack of resources	217
	– Cost pressures are widely reported to have undermined integrity of TAR	217

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DON PARUS		
Ref. No.	**Background Documents**	**Page Nos.**
9	Interview summary or Don Parus, October 12 ,2006	
	– Pat Gower came to TXC but would go out on his own....he knew the condition of the site	5
	– Parus never got any feedback from Gower....	6
	– In 2005, Gower cut Parus capex budget by 25 % via an E-mail	6
	Deposition of Don Parus June 22, 2006	
	– It was the capex budget and the challenge was a reduction by 25%	177
	– Gower told him you are going to cut capex and you must live with it!	225
	– Gower and I worked together in the past ...Not friends...	254
10	Interview summary of Don Parus October 12, 2006	
	– The heavy emphasis at the R&M conferences was to reduce TXC capital cost	11
11	Interview summary of Don Parus October 12, 2006	
	– These meetings were around compliance and personal safety	10
	– Reaction from London was muted...	13
	Deposition of Don Parus June 22, 2006	
	– Information...it didn't seem to be a shock to them	111
	– Telos...BP as a corporation has had the blindness...lack passion and knowledge on PSM	233
12	Interview summary of Don Parus October 12, 2006	
	– When Parus started (2002)...day to day operations reported to him	4
	– Refinery docks were bad ...this was a refining and BUL issue	9
	Interview summary of Don Parus April 28 , 2005	
	– Site director South Houston which entailed integration	2
	– Been site director officially since April 1 2002	2
	Deposition of Don Parus June 22, 2006	
	– I was in charge of the integration value ...	13
	– It would be fair to say I learned some aspects of the culture in April 2002	19
	– I'm going to speak from the window that I can speak from -- June 2004 to the time of the incident	176-177
	– I asked ATK Veba to come to TXC....May-June 2002	185-186
	– Describes his task as SHIS director	298-300
	– About Hale ...we did not share responsibilities...	304

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13	Interview of Don Parus October 12, 2006	
	– 60% of his time spend outside	2
	– Parus wore four hats during that time (end 2004)….	7
	– Parus spent most of his time on the Innovene separation	9, 12
	Interview Don Parus April 28, 2005	
	– Kathleen Lucas appointment...and then allows me to run the other areas...commercial, financial, etc.	5
	– Complexity of Innovene separation…	16-17
	Deposition of Don Parus June 22, 2006	
	– Well it's not a stretch to say you were doing 3 jobs…yes I was.	73
14	Interview Don Parus October 12, 2006	
	– The goal was to improve integration value of the 5 sites	5
	Interview Don Parus April 28, 2005	
	– So there is in each of these areas 4 to 5 KPI's	4
	– (Telos)…we needed to get more into that (morale of the workforce) area	8
	– We were going to go after those four additional things	9
	– Compliance would be the 5th	10
	– One of the 1000 day goals was the PAS score	14
15	Interview Don Parus October 12, 2006	
	– Parus presented Telos to Hoffman and Gower …he tied in audits, fatalities, follow up…	10
	– ...TXC deferred maintenance to meet the budget	13
	– Parus realized if there was a tropical storm there would be a disaster at TXC	13
	Deposition Don Parus June 22, 2006	
	– I shared with the leadership my plans, my reasoning for moving forward	106-111
	– Did you share the brutal facts…I described safety through the 5 lenses.	115-117
16	Deposition of Don Parus June 22, 2006	
	– I don't know if I have the energy to single-handedly turn the site around	243-244

Hoffman

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MIKE HOFFMAN		
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1	Hoffman Deposition	15, 16
2	Hoffman Interview – Note the contrast between Texas City and Carson regarding loss of containment issues	1, 3
	Hoffman Interview – Condition was apparent, but risks were not understood – Aware of AT Kearney report	4 1-2
	Hoffman Deposition	E.g. 48-49, 55-57, 241, 253
	– Note, however, not aware of Texas City fatality record until after March 23 – Aware of AT Kearney	66 228
3	Hoffman Interview	Evident throughout
	Hoffman Deposition	Evident throughout
4	Hoffman Interview – Note: While the team did not analyze his calendar, we could not find an occasion he went to TXC specifically in response to any particular problem, or more importantly, the precursor events of 2004. His visits were "2 or 3 times per year" as a routine. See also Hoffman Deposition p. 319 (going to TXC in 2005 to review 2006 budget)	3, 4
	Manzoni Interview – No knowledge of fires, integrity	1-4
5	Parus Interview – Note: Apparently went to TXC once in 2006. Hoffman Deposition p. 21	10
6	Hoffman Interview – States that the Refining version of the greenbook was a response to the star site concept – Reporting relationships where he held performance contract, but others did performance reviews; notes that he did not really use	1-2 1, 2, 5

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	the performance contract – Put Hale in place to get information	1-2
	Parus Interview – Accountabilities were not clear in 2004	10
	Manzoni Interview	2, 3
7	Hoffman Interview	See p. 2, 6
	Manzoni Interview – The overall impression of the team was that Manzoni lacked the detailed knowledge possessed by Hoffman	2, 3, 4
8	Hoffman Interview	1-2
	Parus Interview – Meetings with Hoffman did not deal with performance	5
9, 10	Hoffman Interview – Understood the issues	2, 6
	Hoffman Deposition – Describes budget process – Responsibility of the site to manage priorities. (No evidence of leadership from Hoffman.)	221-223 97
11	Hoffman Interview – Understood personal safety was not the issue – Understood the issue and had substantial experience at Carson with related behavioral safety training	4 1, 3
	Hoffman Deposition – Understood issue – States that Joe Barnes knew process safety because he had an operational background	226-229 108-109
	Parus Interview – Note: Discussion about emphasis with Parus in 2004 about Innovene – Parus: I thought Manzoni/Hoffman/Gower would have ripped the covers off after the 2004 incident	10 13

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12	Hoffman Interview Hoffman Deposition – Discussion about role of Bill Ralph	4 107-109
13	Hoffman Interview – Did not understand that Parus created a structure that undermined role	5
14	Hoffman Interview Hoffman Deposition Parus Interview – Mixed level of support	2 39-41 5
15	Hoffman Interview Hoffman Deposition	1 Numerous references
16	This is the team's conclusion based on the interviews with both Hoffman and Manzoni	
17	Hoffman Interview – See also Manzoni Interview	6
18	Hoffman Interview	3
19	This is the team's conclusion based on interviews with several leaders in Hoffman's organization See also Manzoni Interview (Hoffman is surrounded by people who agree with him)	 3
20	Hoffman Interview – Also noted by other witnesses including delegation of performance management duties to others	1
21	Hoffman Interview – See also Manzoni Interview (No discussion on shutdowns of TXC)	3 1