Nicole Gurba

From: Joan Baker

Sent: Wednesday, October 10, 2018 3:16 PM

To: Marcel Garsaud

Subject: FW: Change Request: HSP 25.0 Risk Management Job Safety Briefing **Attachments:** Change Request: HSP 25.0 Risk Management Job Safety Briefing

Hello,

Please find the attached **change request** for your approval.

Please answer this question in your response. How could this change affect Mission ZERO?

Regards,

Joan

Nicole Gurba

Subject: Change Request: HSP 25.0 Risk Management Job Safety Briefing

Start Date: Monday, September 10, 2018 **Due Date:** Wednesday, October 10, 2018

Status: In Progress

Percent Complete: 0%

Total Work: 0 hours **Actual Work:** 0 hours

Owner: Joan Baker

Please review and approve the attached revised policy HSP 25.0 Risk Management Job Safety Briefing. This change was generated by the TMSA3 Chevron Audit.





Compliance Department Approval/Recommendations: **Approved 9-10-18** Director of Compliance, Gulf-Inland, **Tessa Seitzinger**

How could this change affect Mission ZERO?

Safety Approval/Recommendations: Approved 10-2-18

Director of Safety, Jarred Adams

How could this change affect Mission ZERO?

Offshore Division Approval/Recommendations: Reviewed 9-10-18

VP of Offshore Operations, **Bruce Matherne** How could this change affect **Mission ZERO**?

Engineering Department Approval/Recommendations: Approved 9-24-18

VP of Engineering, Denny Fromenthal

How could this change affect **Mission ZERO**?

Purchasing Department Approval/Recommendations: Approved 9-24-18

Director of Purchasing, Greg Lohfink

How could this change affect **Mission ZERO**?

Sales & Logistics Department Approval/Recommendations: Approved 9-24-18

VP Sales & Logistics, Tom Fisher

How could this change affect Mission ZERO?

Claims Department Approval/Recommendations: Approved 9-24-18

Claims Manager, Ronnie Dupuy

How could this change affect **Mission ZERO**?

No part of a report of a marine casualty investigation shall be admissible as evidence in any civil or administrative proceeding, other than an administrative proceeding initiated by the United States. 46 U.S.C. §6308.

Licensing, Training, and Development Department Approval/Recommendations: **Approved 10-2-18** Manager, **Ron Lanassa** How could this change affect **Mission ZERO**?

Crewing/Human Resource Approval/Recommendations: Approved 10-3-18 Director of Crew Management and HR, Landry Kirk How could this change affect Mission ZERO?

Senior Vice President Operations, Marcel Garsaud Approval/Recommendations: How could this change affect Mission ZERO?

MARQUETTE TRANSPORTATION COMPANT HEALTH AP			ND SAFETT PLAN
Title: RISK	Issue Date: August 1, 2012	Last Revised:	Procedure Number: HSP-25.0
MANAGEMENT/ JOB SAFETY BRIEFING	Approved By: Gulf – Inlan	nd Operations	Page: 1 of 8

HEALTH AND CAFETY DLAN

1.0 PURPOSE:

MADOLIETTE TOANSDODTATION COMPANY

- This section is intended to provide guidance to shore based and shipboard personnel in conducting risk management for identifying potential hazards and managing operational, environmental and asset risks, including those relating to health and hygiene. By identifying potential risks and assessing their severity and likelihood, we can prevent and reduce exposure to personnel, equipment and the environment. Our goal is to make the evolution as safe as possible by reducing the Total Risk Score by as much as is reasonably possible.
- 1.2 Risk Management is not a solitary process as it requires a dynamic assessment of hazards and thorough evaluation of risks. This is done to ensure appropriate decision making be made as to whether sufficient precautions have been taken or whether additional actions need to be taken to reduce risk. The objective is to eliminate accidents, injuries, spills and illness onboard Marquette vessels.
- 1.3 This procedure has therefore been designed to encourage ownership of risk management by the crew carrying out the day to day tasks at the point of risk and that crew taking full accountability for determining the most appropriate level of risk management for such tasks.
- Job safety briefings are not safety meetings and should not be treated as such.

 Job safety briefings function as an opportunity to recognize hazards and reduce those hazard risks prior to beginning a task.
- 1.5 In order to raise awareness and minimize risk to crewmembers through job safety briefings, the Green, Amber, Red Model will be used while performing tasks on board Marquette Transportation Vessels.

2.0 SCOPE:

This applies to all employees on board company owned or operated vessels.

3.0 RESPONSIBILITY:

- 3.1 The Captain or wheelhouse person on watch should make reasonable efforts to enforce this procedure.
- 3.2 All vessel crewmembers are required to actively participate in job safety

briefings utilizing the Job Safety Briefing Worksheet.

4.0 PROCEDURE:

4.1 Hazard Identification & Risk Discovery

- 4.1.1 A hazard is a source of potential harm or damage or a situation with potential for harm or damage.
- 4.1.2 The identification of hazards is therefore a critical step in performing a risk assessment as hazards that are overlooked can often result in harm. Hazard identification is most effective when there are multiple persons participating in the process who possess appropriate levels of practical knowledge and competence for the task involved. Asking questions should help to identify where there is a hazard. For example, the following questions are intended to assist in identifying hazards:
 - 4.1.2.1 What are the threats to **Mission ZERO**?
 - 4.1.2.2 Is there a source of harm?
 - 4.1.2.3 What can go wrong?
 - 4.1.2.4 How could harm occur?

4.2 Risk Analysis – Risk Control Measures

- 4.2.1 The analysis of risk provides insight into a multitude of potential problems that can be encountered when performing a task so that the significance of the various identified hazards can be fully understood. This analysis involves determining the potential consequences of the identified hazards and the likelihood of such consequences occurring.
- 4.2.2 The following questions are intended to assist in analyzing hazards and associated risks to **Mission ZERO** so a consequence and likelihood rating can be assigned (Total Risk Score):
 - 4.2.2.1 Who (or What) could be harmed?
 - 4.2.2.2 What are the consequences?
 - 4.2.2.3 Will assets be placed at risk?
 - 4.2.2.4 What is the likelihood that harm can occur?
 - 4.2.2.5 Are the tools and equipment appropriate for the job and in sound operating condition?

4.2.2.6	Are the personnel involved in performing the task experienced and physically fit?
4.2.2.7	Are there existing safeguards in place and are they functioning as designed?
4.2.2.8	Is there any obvious reason why I should not attempt to begin this task?

4.3 Risk Evaluation 1

4.3.1 Risk evaluation and risk control are accomplished through the use of our Job Safety Briefing Worksheet.

4.4 **Job Safety Briefing**

- 4.4.1 Given that risk analysis can be a subjective process, in large part due to the varying levels of practical experience and knowledge of persons involved in evaluating the hazards, it is not uncommon for inconsistencies to be introduced from vessel to vessel when assessing the same task. Risk analysis is based upon the circumstances which are present at the time of the evaluation and the perception of the crew.
- 4.4.2 The Wheelman on watch and all personnel involved with the Job/Task are responsible for ensuring identified control measures are effectively implemented. Identified safeguards and control measures shall be implemented prior to commencing the task and monitored throughout the task. The Wheelman on watch shall ensure that safeguards and controls are clearly understood by everyone and that all crew members understand their STOP WORK responsibility at any time with the task or operation (situational awareness).
- 4.4.3 At watch change, prior to assuming control of an on-going Job/Task, the Wheelman on Watch shall conduct a Job Safety Briefing on the Job/Task being performed with the on-coming watch. Both the Wheelman on watch and the oncoming Wheelman must evaluate the need to temporarily halt the Job/Task to conduct a new Job Safety Briefing.
- 4.4.4 When Job Safety Briefings that identify residual risks as "Marginally Tolerable" or "Unacceptable", after the implementation of control measures the Wheelman conducting the Job Safety Briefing shall contact the On-Call Port Captain for guidance prior to starting the Task or Job. Permission for commencing these tasks SHALL be

- subject to a risk-based decision after risk assessment has been properly reviewed.
- 4.4.5 Prior to and during the performance of each job/task employees should continually ask, "What are the hazards associated with this task and what can I do to prevent an unintended consequence? What can I do to achieve Mission ZERO"

5.0 RISK ASSESSMENT MODEL

- 5.1 All Job Safety Briefings require the use of a Job Safety Briefing Worksheet. Job Safety Briefing Worksheet is required for all high consequence/high energy evolutions and before starting or commencing any task. A Job Safety Briefing must be performed after STOP WORK RESPONSIBILITY has been exercised.
- 5.2 Whenever a Job Safety Briefing is conducted a log entry must be made in the comments section of the ship's log to include time briefing took place and the Job/Task that was assessed.
- 5.3 In order to effectively assess and manage risk, all involved crewmembers are to actively participate in job briefings and provide input. Group discussions are critical to the understanding of risks and how they will be managed.
- 5.4 Crews shall discuss the following elements and assign a number from 1-10 (1 for minimum risk and 10 for maximum risk):

SUPERVISION: Supervisory control considers how many times the individual has supervised the task/evolution taking place and whether effective supervision can occur (no other distractions or responsibilities).

- 1-3: Supervisor has supervised the task multiple times. Supervisor has worked with & supervised the present crew multiple times for this task. Crew assigned have worked this task multiple times before in Relief Mate or Mate position. There is NO mismatch in experience, for example, a DH leading a DHT in a task. The task assigned is not locking, docking, taking on water, lube oil or fuel oil. DO NOT use a risk code of 1-3 for these tasks.
- 4-6: Supervisor has only performed this task on two or less occasions. Supervisor, Relief Mate or Mate has not performed this task within the last 6 months. Supervisory, Relief Mate or Mate has not transited this particular bridge, lock or facility within the last 6 months. There is a Leadman supervising the task and he has done or supervised the task within the last 6 months.
- 7-9: Supervisor has never performed task before. Supervisor or crew have never transited this bridge, lock or facility before. Supervisor has never worked with the appointed lookout before in calling out approach distances. First time crew have performed this

task together as a team.

10: There is a DH supervising a DHT on this task.

PLANNING: The preparation and organization based on information and experience that the team has developed/attained regarding the task with the goal of **Mission Zero** as a target. What PPE is required for this task? What hazards exist with this job? How can you reduce the risks that come with this job? How much time do you have to plan and prepare for this job?

- 1-3: The team has adequate time to carefully examine the task and conduct a walk-through of the task. All hazards are identified and equipment inspected prior to performing the task.
- 4-6: The team has time to examine the task and identify the hazards and that the equipment has been inspected before performing the task. Unable to conduct a walk-through before performing the task.
- 7-9: The team identifies the hazards associated with the task, but does not have time to inspect the equipment nor conduct a walk-through prior to performing the task.
- 10: This is the first time you have planned for this task as a supervisor.

CREW EXPERIENCE: Crew experience considers how many times <u>the least</u> <u>experienced team member</u> as participated in the assigned task/evolution at that location; how many times has the present crew performed this specific task together as a team. You may have an experienced Senior DH that has been thru Port Allen and the Industrial Locks numerous times, but if he has never been through the Brazos, then he has no experience for that task.

- 1-3: Every member of the deck crew is at least a Senior DH and has performed this task at least 5 times as a team within the last 3 months.
- 4-6: Every member of the deck crew is at least a Senior DH, but they have not performed this task as a team at least twice within the last 3 months.
- 7-9: One member of the deck crew performing this task is a DH and the team has not performed this specific task together at least twice in the last 3 months.
- 10: This is a multi-person task with a DHT as part of the team.

CREW FITNESS: Crew Fitness considers the physical and mental state of the crew. This is a function of the amount and quality of rest that each crewmember has had within the last 24 hours; how many hours has the crew worked in heat exceeding 85 degrees within the last 24 hours; are all A/C units working properly so that crewmembers can properly rest and recover.

- 1-3: No crewmember has worked more than 12 hours in the last 24; all A/C units are working properly; the crew is properly hydrated; all crewmembers state they feel fit and well.
- 4-6: No crewmember has worked more than 12 hours in the last 24; all crewmembers are properly hydrated, A/C units are working, and no more than one crew member is feeling tired or under the weather.
- 7-9: A/C not working properly; a crewmember has worked more than 14 hours within the last 24.

ENVIORNMENTAL CONDITIONS: Environmental conditions should consider factors affecting personal performance as well as the performance of the towboat. These include, but are not limited to; time of day, background lights from shore, temperature, precipitation, wind, river/current conditions, proximity to navigational hazards.

- 1-3: Daytime operation; visibility is excellent; actual or predicted forecast call for humidity of less than 80%; temperature range during the evolution is higher than 55 degrees and lower than 80 degrees; winds below 10mph with gusts no higher than 15mph; no precipitation is present nor predicted during the evolution; seas are calm; current less than 1mph.
- 4-6: Nighttime operations; background lighting is present; visibility is clear and good; actual or predicted forecast calls for humidity of more than 80% but less than 90%; temperature range during the evolution is below 55 degrees or above 80 degrees but less than 90 degrees; winds below 15mph with gusts no higher than 20mph; no precipitation is present nor predicted during the evolution; seas are calm, current less than 1mph.
- 7-9: Actual or predicted forecast calls for humidity of 90% or greater; temperature range during the evolution is below 40 degrees or above 90 degrees; winds below 18mph with gusts no higher than 22mph; precipitation is present or predicted during the evolution.
- 10: During Full Moon/Spring Tide.

VOYAGE, EVENT, or EVOLUTION COMPLEXITY: Job task complexity should consider both the time and the situation. Generally, the longer the job or task takes, the greater the hazard and the greater the risks. Multiple iterations of a task or an evolution over a specific space of time increases the opportunity for a negative event to occur. If Marquette policy requires a call to a Port Captain for permission to proceed – then the Job Task Complexity has already been scored as a 10 by the company and must be scored a 10 on the JSB. If a job task or evolution is going to occur across a watch change, then the job task complexity is a 10 and a new JSB must be conducted by the oncoming watch before it can continue.

- 1-3: Single person task; task/job takes less than 4 hours to complete; task/job is onboard the vessel; task does not require a Permit-to-Work; job/task does not involve the transfer on or off the boat of any liquids.
- 4-6: Multi-person job/task; job/task may take up to 5 hours to complete; job/task may involve going on tow; task does not require a Permit-to-Work as per Marquette policy; job/task does not involve the transfer on or off the boat of any liquids.
- 7-9: Job/Task requires a Permit-to-Work as per Marquette Policy.
- 10: Job/Task involves taking on or discharging of liquids from the boat to a facility.

LOW RISK DOES NOT EQUAL NO RISK!

- 5.5 Once numbers have been assigned to each of the six elements, the numbers will be added to provide a total risk score. This number will be applied to the evaluation scale to show the following levels of risk:
 - 5.5.1 6 19 Low risk (Green);
 - 5.5.2 20-30 Moderate Risk (Amber), consider adopting procedures to minimize risk.
 - 5.5.3 31-60 High Risk (Red), implement measures to reduce risk prior to commencing work.
- 5.6 Measures to reduce and minimize risk can include, but are not limited to:
 - 5.6.1 Heighten the awareness of crewmembers to known hazards;
 - 5.6.2 Increased communications
 - 5.6.3 Additional personnel, supplies, and/or equipment
 - 5.6.4 Waiting for existing weather conditions to improve
 - 5.6.5 Allowing time for crew to rest when fatigued, prior to starting task
- 5.7 In the event the results of the Job Safety Briefing Worksheet fall in the amber or red zone, measures should be taken to identify the available safety controls and their implementation. Another scoring must be completed, and if measures to reduce the risk into the green zone are not effective, the Captain or wheelhouse person on watch must contact the Duty Port Captain for guidance.
- Job Safety Briefing Worksheets are to be completed for all high consequence/high energy evolutions. Situations include, but are not limited to:
 - 5.8.1 Tow Work:
 - 5.8.2 Locking;
 - 5.8.3 Pulling grounded barges;

- 5.8.4 Skiff Operations;
- 5.8.5 Fueling Operations;
- Taking on Lube oil, Gear oil, and or Fresh water; 5.8.6
- 5.8.7 Going on top of Wheelhouse;
- Grinding or Hot Work; 5.8.8
- 5.8.9 Prior to our re-starting a Job/Task which was halted by STOP WORK RESPONSIBILITY;
- 5.8.10 Prior to entering a Fleet area, getting underway, and or approaching a dock.
- 5.8.11 Any task that requires a permit to work (i.e. hot work, working at heights, lock out/tag out, etc.)
- 5.8.12 High water/fast current
- 5.8.13 Barge Mooring

5.9 **Management of Change**

Marquette Gulf-Inland – Management of Change Policy is the procedure utilized to identify, assess, and manage the risk of hazards introduced by new or non-routine changes to: equipment, staffing (ashore or afloat), or procedures.

6.0 **RECORD RETENTION:**

6.1 The Job Safety Briefing Worksheet is retained onboard for a period of 30 days and then sent to the Compliance Department at the end of each month. The Job Safety Briefing Worksheet is retained for a period of three (3) years.

7.0 **REFERENCE:**

7.1 TMSA3, 9.1.3, Safety Management – Shore Based Monitoring

8.0 **REVISION HISTORY:**

0 Initial issue	August 1, 2012
1 First Revision – Revised Title Block & Section 1.1, Added Sect	ion 4.2
	March 29, 2016
2 Second Revision – Revised in its entirety	May 6, 2016
3 Third Revision – Added Section 4.8.7	Aug. 16, 2016
4 Fourth Revision – Minor editorial changes	November 2, 2016
5 Fifth Revision – Added Section 5.4 & 7, Revised 5.6.1-5.6.3	May 9, 2017
6 Sixth Revision – Minor changes to Section 6.1	March 5, 2018
7 Seventh Revision – Minor change to Section 5.8	June 28, 2018
8 Eighth Revision – Added Section 5.8.13	XXXXX

NIETTE TO ANCOODTATION COMPAN

MARQUETTE TRANSPORTATION COMPANY HEALTH AND SAFETY PLAN				ND SAFELT PLAN
	Title: RISK	Issue Date: August 1, 2012	Last Revised:	Procedure Number: HSP-25.0
	MANAGEMENT/ JOB SAFETY	Approved By: Gulf – Inland Operations		Page: 1 of 8
	BRIEFING			

1.0 PURPOSE:

- 1.1 This section is intended to provide guidance to shore based and shipboard personnel in conducting risk management for identifying potential hazards and managing operational, environmental and asset risks, including those relating to health and hygiene. By identifying potential risks and assessing their severity and likelihood, we can prevent and reduce exposure to personnel, equipment and the environment. Our goal is to make the evolution as safe as possible by reducing the Total Risk Score by as much as is reasonably possible.
- 1.2 Risk Management is not a solitary process as it requires a dynamic assessment of hazards and thorough evaluation of risks. This is done to ensure appropriate decision making be made as to whether sufficient precautions have been taken or whether additional actions need to be taken to reduce risk. The objective is to eliminate accidents, injuries, spills and illness onboard Marquette vessels.
- 1.3 This procedure has therefore been designed to encourage ownership of risk management by the crew carrying out the day to day tasks at the point of risk and that crew taking full accountability for determining the most appropriate level of risk management for such tasks.
- Job safety briefings are not safety meetings and should not be treated as such.

 Job safety briefings function as an opportunity to recognize hazards and reduce those hazard risks prior to beginning a task.
- 1.5 In order to raise awareness and minimize risk to crewmembers through job safety briefings, the Green, Amber, Red Model will be used while performing tasks on board Marquette Transportation Vessels.

2.0 SCOPE:

This applies to all employees on board company owned or operated vessels.

3.0 RESPONSIBILITY:

- 3.1 The Captain or wheelhouse person on watch should make reasonable efforts to enforce this procedure.
- 3.2 All vessel crewmembers are required to actively participate in job safety

briefings utilizing the Job Safety Briefing Worksheet.

4.0 PROCEDURE:

4.1 Hazard Identification & Risk Discovery

- 4.1.1 A hazard is a source of potential harm or damage or a situation with potential for harm or damage.
- 4.1.2 The identification of hazards is therefore a critical step in performing a risk assessment as hazards that are overlooked can often result in harm. Hazard identification is most effective when there are multiple persons participating in the process who possess appropriate levels of practical knowledge and competence for the task involved. Asking questions should help to identify where there is a hazard. For example, the following questions are intended to assist in identifying hazards:
 - 4.1.2.1 What are the threats to **Mission ZERO**?
 - 4.1.2.2 Is there a source of harm?
 - 4.1.2.3 What can go wrong?
 - 4.1.2.4 How could harm occur?

4.2 Risk Analysis – Risk Control Measures

- 4.2.1 The analysis of risk provides insight into a multitude of potential problems that can be encountered when performing a task so that the significance of the various identified hazards can be fully understood. This analysis involves determining the potential consequences of the identified hazards and the likelihood of such consequences occurring.
- 4.2.2 The following questions are intended to assist in analyzing hazards and associated risks to **Mission ZERO** so a consequence and likelihood rating can be assigned (Total Risk Score):
 - 4.2.2.1 Who (or What) could be harmed?
 - 4.2.2.2 What are the consequences?
 - 4.2.2.3 Will assets be placed at risk?
 - 4.2.2.4 What is the likelihood that harm can occur?
 - 4.2.2.5 Are the tools and equipment appropriate for the job and in sound operating condition?

4.2.2.6	Are the personnel involved in performing the task experienced and physically fit?
4.2.2.7	Are there existing safeguards in place and are they functioning as designed?
4.2.2.8	Is there any obvious reason why I should not attempt to begin this task?

4.3 **Risk Evaluation 1**

4.3.1 Risk evaluation and risk control are accomplished through the use of our Job Safety Briefing Worksheet.

4.4 **Job Safety Briefing**

- 4.4.1 Given that risk analysis can be a subjective process, in large part due to the varying levels of practical experience and knowledge of persons involved in evaluating the hazards, it is not uncommon for inconsistencies to be introduced from vessel to vessel when assessing the same task. Risk analysis is based upon the circumstances which are present at the time of the evaluation and the perception of the crew.
- 4.4.2 The Wheelman on watch and all personnel involved with the Job/Task are responsible for ensuring identified control measures are effectively implemented. Identified safeguards and control measures shall be implemented prior to commencing the task and monitored throughout the task. The Wheelman on watch shall ensure that safeguards and controls are clearly understood by everyone and that all crew members understand their STOP WORK responsibility at any time with the task or operation (situational awareness).
- 4.4.3 At watch change, prior to assuming control of an on-going Job/Task, the Wheelman on Watch shall conduct a Job Safety Briefing on the Job/Task being performed with the on-coming watch. Both the Wheelman on watch and the oncoming Wheelman must evaluate the need to temporarily halt the Job/Task to conduct a new Job Safety Briefing.
- 4.4.4 When Job Safety Briefings that identify residual risks as "Marginally Tolerable" or "Unacceptable", after the implementation of control measures the Wheelman conducting the Job Safety Briefing shall contact the On-Call Port Captain for guidance prior to starting the Task or Job. Permission for commencing these tasks SHALL be

- subject to a risk-based decision after risk assessment has been properly reviewed.
- 4.4.5 Prior to and during the performance of each job/task employees should continually ask, "What are the hazards associated with this task and what can I do to prevent an unintended consequence? What can I do to achieve Mission ZERO"

5.0 RISK ASSESSMENT MODEL

- 5.1 All Job Safety Briefings require the use of a Job Safety Briefing Worksheet. Job Safety Briefing Worksheet is required for all high consequence/high energy evolutions and before starting or commencing any task. A Job Safety Briefing must be performed after STOP WORK RESPONSIBILITY has been exercised.
- 5.2 Whenever a Job Safety Briefing is conducted a log entry must be made in the comments section of the ship's log to include time briefing took place and the Job/Task that was assessed.
- 5.3 In order to effectively assess and manage risk, all involved crewmembers are to actively participate in job briefings and provide input. Group discussions are critical to the understanding of risks and how they will be managed.
- 5.4 Crews shall discuss the following elements and assign a number from 1-10 (1 for minimum risk and 10 for maximum risk):

SUPERVISION: Supervisory control considers how many times the individual has supervised the task/evolution taking place and whether effective supervision can occur (no other distractions or responsibilities).

- 1-3: Supervisor has supervised the task multiple times. Supervisor has worked with & supervised the present crew multiple times for this task. Crew assigned have worked this task multiple times before in Relief Mate or Mate position. There is NO mismatch in experience, for example, a DH leading a DHT in a task. The task assigned is not locking, docking, taking on water, lube oil or fuel oil. DO NOT use a risk code of 1-3 for these tasks.
- 4-6: Supervisor has only performed this task on two or less occasions. Supervisor, Relief Mate or Mate has not performed this task within the last 6 months. Supervisory, Relief Mate or Mate has not transited this particular bridge, lock or facility within the last 6 months. There is a Leadman supervising the task and he has done or supervised the task within the last 6 months.
- 7-9: Supervisor has never performed task before. Supervisor or crew have never transited this bridge, lock or facility before. Supervisor has never worked with the appointed lookout before in calling out approach distances. First time crew have performed this

task together as a team.

10: There is a DH supervising a DHT on this task.

PLANNING: The preparation and organization based on information and experience that the team has developed/attained regarding the task with the goal of **Mission Zero** as a target. What PPE is required for this task? What hazards exist with this job? How can you reduce the risks that come with this job? How much time do you have to plan and prepare for this job?

- 1-3: The team has adequate time to carefully examine the task and conduct a walk-through of the task. All hazards are identified and equipment inspected prior to performing the task.
- 4-6: The team has time to examine the task and identify the hazards and that the equipment has been inspected before performing the task. Unable to conduct a walk-through before performing the task.
- 7-9: The team identifies the hazards associated with the task, but does not have time to inspect the equipment nor conduct a walk-through prior to performing the task.
- 10: This is the first time you have planned for this task as a supervisor.

CREW EXPERIENCE: Crew experience considers how many times the least experienced team member as participated in the assigned task/evolution at that location; how many times has the present crew performed this specific task together as a team. You may have an experienced Senior DH that has been thru Port Allen and the Industrial Locks numerous times, but if he has never been through the Brazos, then he has no experience for that task.

- 1-3: Every member of the deck crew is at least a Senior DH and has performed this task at least 5 times as a team within the last 3 months.
- 4-6: Every member of the deck crew is at least a Senior DH, but they have not performed this task as a team at least twice within the last 3 months.
- 7-9: One member of the deck crew performing this task is a DH and the team has not performed this specific task together at least twice in the last 3 months.
- 10: This is a multi-person task with a DHT as part of the team.

CREW FITNESS: Crew Fitness considers the physical and mental state of the crew. This is a function of the amount and quality of rest that each crewmember has had within the last 24 hours; how many hours has the crew worked in heat exceeding 85 degrees within the last 24 hours; are all A/C units working properly so that crewmembers can properly rest and recover.

- 1-3: No crewmember has worked more than 12 hours in the last 24; all A/C units are working properly; the crew is properly hydrated; all crewmembers state they feel fit and well.
- 4-6: No crewmember has worked more than 12 hours in the last 24; all crewmembers are properly hydrated, A/C units are working, and no more than one crew member is feeling tired or under the weather.
- 7-9: A/C not working properly; a crewmember has worked more than 14 hours within the last 24.

ENVIORNMENTAL CONDITIONS: Environmental conditions should consider factors affecting personal performance as well as the performance of the towboat. These include, but are not limited to; time of day, background lights from shore, temperature, precipitation, wind, river/current conditions, proximity to navigational hazards.

- 1-3: Daytime operation; visibility is excellent; actual or predicted forecast call for humidity of less than 80%; temperature range during the evolution is higher than 55 degrees and lower than 80 degrees; winds below 10mph with gusts no higher than 15mph; no precipitation is present nor predicted during the evolution; seas are calm; current less than 1mph.
- 4-6: Nighttime operations; background lighting is present; visibility is clear and good; actual or predicted forecast calls for humidity of more than 80% but less than 90%; temperature range during the evolution is below 55 degrees or above 80 degrees but less than 90 degrees; winds below 15mph with gusts no higher than 20mph; no precipitation is present nor predicted during the evolution; seas are calm, current less than 1mph.
- 7-9: Actual or predicted forecast calls for humidity of 90% or greater; temperature range during the evolution is below 40 degrees or above 90 degrees; winds below 18mph with gusts no higher than 22mph; precipitation is present or predicted during the evolution.
- 10: During Full Moon/Spring Tide.

VOYAGE, EVENT, or EVOLUTION COMPLEXITY: Job task complexity should consider both the time and the situation. Generally, the longer the job or task takes, the greater the hazard and the greater the risks. Multiple iterations of a task or an evolution over a specific space of time increases the opportunity for a negative event to occur. If Marquette policy requires a call to a Port Captain for permission to proceed – then the Job Task Complexity has already been scored as a 10 by the company and must be scored a 10 on the JSB. If a job task or evolution is going to occur across a watch change, then the job task complexity is a 10 and a new JSB must be conducted by the oncoming watch before it can continue.

- 1-3: Single person task; task/job takes less than 4 hours to complete; task/job is onboard the vessel; task does not require a Permit-to-Work; job/task does not involve the transfer on or off the boat of any liquids.
- 4-6: Multi-person job/task; job/task may take up to 5 hours to complete; job/task may involve going on tow; task does not require a Permit-to-Work as per Marquette policy; job/task does not involve the transfer on or off the boat of any liquids.
- 7-9: Job/Task requires a Permit-to-Work as per Marquette Policy.
- 10: Job/Task involves taking on or discharging of liquids from the boat to a facility.

LOW RISK DOES NOT EQUAL NO RISK!

- Once numbers have been assigned to each of the six elements, the numbers will be added to provide a total risk score. This number will be applied to the evaluation scale to show the following levels of risk:
 - 5.5.1 6 19 Low risk (Green);
 - 5.5.2 20-30 Moderate Risk (Amber), consider adopting procedures to minimize risk.
 - 5.5.3 31-60 High Risk (Red), implement measures to reduce risk prior to commencing work.
- 5.6 Measures to reduce and minimize risk can include, but are not limited to:
 - 5.6.1 Heighten the awareness of crewmembers to known hazards:
 - 5.6.2 Increased communications
 - 5.6.3 Additional personnel, supplies, and/or equipment
 - 5.6.4 Waiting for existing weather conditions to improve
 - 5.6.5 Allowing time for crew to rest when fatigued, prior to starting task
- 5.7 In the event the results of the Job Safety Briefing Worksheet fall in the amber or red zone, measures should be taken to identify the available safety controls and their implementation. Another scoring must be completed, and if measures to reduce the risk into the green zone are not effective, the Captain or wheelhouse person on watch must contact the Duty Port Captain for guidance.
- 5.8 Job Safety Briefing Worksheets are to be completed for all high consequence/high energy evolutions. Situations include, but are not limited to:
 - 5.8.1 Tow Work:
 - 5.8.2 Locking;
 - 5.8.3 Pulling grounded barges;

- 5.8.4 Skiff Operations;
- 5.8.5 Fueling Operations;
- 5.8.6 Taking on Lube oil, Gear oil, and or Fresh water;
- 5.8.7 Going on top of Wheelhouse;
- 5.8.8 Grinding or Hot Work;
- 5.8.9 Prior to our re-starting a Job/Task which was halted by STOP WORK RESPONSIBILITY;
- 5.8.10 Prior to entering a Fleet area, getting underway, and or approaching a dock.
- 5.8.11 Any task that requires a permit to work (i.e. hot work, working at heights, lock out/tag out, etc.)
- 5.8.12 High water/fast current
- 5.8.13 Barge Mooring

5.9 **Management of Change**

5.9.1 Marquette Gulf-Inland – Management of Change Policy is the procedure utilized to identify, assess, and manage the risk of hazards introduced by new or non-routine changes to: equipment, staffing (ashore or afloat), or procedures.

6.0 RECORD RETENTION:

6.1 The Job Safety Briefing Worksheet is retained onboard for a period of 30 days and then sent to the Compliance Department at the end of each month. The Job Safety Briefing Worksheet is retained for a period of three (3) years.

7.0 REFERENCE:

7.1 TMSA3, 9.1.3, Safety Management – Shore Based Monitoring

8.0 REVISION HISTORY:

O T '4' 1'

U Initial issue	August 1, 2012	
1 First Revision – Revised Title Block & Section 1.1, Added Section 4.2		
	March 29, 2016	
2 Second Revision – Revised in its entirety	May 6, 2016	
3 Third Revision – Added Section 4.8.7	Aug. 16, 2016	
4 Fourth Revision – Minor editorial changes	November 2, 2016	
5 Fifth Revision – Added Section 5.4 & 7, Revised 5.6.1-5.6.3	May 9, 2017	
6 Sixth Revision – Minor changes to Section 6.1	March 5, 2018	
7 Seventh Revision – Minor change to Section 5.8	June 28, 2018	
8 Eighth Revision – Added Section 5.8.13	XXXXX	

. 1 2012