



HAZARD REGISTER - CREW SPECIFIC DATA

Client logo

Project / Vessel data

PACIFIC TITAN
SEBOA - 2008
Consortium Members

Specific hazard code
hazard code cat 3
hazard number
Hazard title

121.1

121

1

Incoming Marine crews

☐ Vessel specific
☒ Survey specific

Hazard assessment

Incoming Marine crews to be familiar with CGGV & Swire QHSE-MS (and JSA) as it applies to their job functions.
Failure of QHSE-MS

Escalating factors

No understanding of Pacific Titan hazards and risks as well as control measures in place.

Recovery

Medevac. Equipped Clinic on board. Paramedic on board.

Additional controls

- Inductions for the new crews
- Experienced Pacific Titan personnel (CGGV & Swire are using the same Captain and Chief Mechanic).

New hazard rating

A5

New area rating

MEDIUM

Reviewing

By S LAIGRE

Date 14/02/2008

Project / Vessel data

PACIFIC TITAN
SEBOA - 2008
Consortium Members

Specific hazard code
hazard code cat 3
hazard number
Hazard title

124.1

124

1

Weather conditions

☐ Vessel specific
☒ Survey specific

Hazard assessment

- High wind often occurs on the South Australia
The wind can destroy some material not secured on board.
The wind increases the hypothermia effect.
- Strong depression occurred
- The fog increases the risk of collision, with other boats, or rig.
- Precipitations will increase the risk of tripping (deck, stairs) and may reduce visibility.

Escalating factors

Medevac. Pressure of the production. No weather forecast information. Lack of supervision. No respect of the procedures. No respect of the MOPO. MOB. Fire. Work boat operation. Lack of PPE's. Close Approach

Recovery

Medevac. Equipped Clinic on board. Paramedic on board.

Additional controls

- No work boat and crane operation are performed during high wind. (MOPO)
- Daily weather forecast information is available.
- An inspection is performed before storm to check if all equipment are correctly secured.
- No close pass if bad visibility

New hazard rating

B3

New area rating

MEDIUM

Reviewing

By S LAIGRE

Date 07/02/2008

Project / Vessel data

PACIFIC TITAN
SEBOA - 2008
Consortium Members

Specific hazard code 134.1
hazard code cat 3 134
hazard number 1
Hazard title Rough sea

☐ Vessel specific
☒ Survey specific

Hazard assessment	Difficult to navigate with small boats (capsizing), same for deployment/retrieval of seismic equipment. Personnel transfer, cross-decking and crane operations may be suspended. MOB and Medevac may become critical to deal with due to the strong heave. Seas breaking over vessel decks may damage equipment and lead to injury/MOB situation. No helicopter support. Rough weather may complicate emergency response plans (helicopters). Fall down hazard is important during rough sea. The material on the deck can broke mooring cable .
Escalating factors	Work boat operation. Man overbord. Bunkering. Medevac. Recovery and deployment of the material. No risk assessment. Lack of supervision. lack of PPE'S. Pressure of the production. Bad house keeping. Engine failure. Steering failure. Sea sick. Slippery floor. Manual lifting handling.No MOPO. Negative attitude towards HSE rules. No procedure in place. Lack of supervision.
Recovery	Medevac. Medic with equipped clinic.
Additional controls	<ul style="list-style-type: none"> - MOPO is followed - People equipped with life jaket and Personal Locator beacon when the risk of MOB is present. (Flash indicator on back deck) - All material on board is secured before bad weather. - No close pass operation should be done during rough sea. - The vessel will take the best safe position to keep safe the material. - Recovery of the gun in case of rough sea.
New hazard rating	C3
New area rating	MEDIUM HIGH
Reviewing	By S LAIGRE
	Date 07/02/2008

Project / Vessel data

PACIFIC TITAN
SEBOA - 2008
Consortium Members

Specific hazard code
hazard code cat 3
hazard number
Hazard title

161.1

161

1

Visible obstacle

☐ Vessel specific
☒ Survey specific

Hazard assessment

Often during seismic operation visible obstacles are encountered the visible obstacles are rig, fishing boats, floating debris, chase boat or other boat.
The hazard is the colliding with the visible obstacle.

Escalating factors

Rough sea. Bad weather. Steering failure. Engine failure. Fishing activities. Fast current. Overspeed. No radio communication. Language problem. Inattention, fatigue of the OOW. Wrong map. No SNA.

Recovery

Emergency procedures.

Additional controls

- Safe navigation area is defined before the starting of the operation.
- The chase boat warn the other boats .
- All visible and fix obstacles are plotted on the navigation screen.
- The safe approach procedure is applied during close approach of the visible obstacle.
- The fix visible obstacles are drew on the survey map.
- Daily communication with Offshore Installation Manager

New hazard rating

B4

New area rating

MEDIUM HIGH

Reviewing

By S LAIGRE
Date 07/02/2008

Project / Vessel data

PACIFIC TITAN
SEBOA - 2008
Consortium Members

Specific hazard code
hazard code cat 3
hazard number
Hazard title

165.1

165

1

Community problem

☐ Vessel specific
☒ Survey specific

Hazard assessment

Local fishing communities are often regarding our activities as a potential source of conflict.
The seismic activity can disturb the fishers.

Escalating factors

No communication.
No damage department (Indemnisation).
No information.

Recovery

Insurance. Public relation .

Additional controls

- Information about the seismic activities should be done before the starting to warn the fishers.
- Chase boat contact on the site day by day.

New hazard rating

B3

New area rating

MEDIUM

Reviewing

By S LAIGRE

Date 07/02/2008

Project / Vessel data

PACIFIC TITAN
SEBOA - 2008
Consortium Members

Specific hazard code
hazard code cat 3
hazard number
Hazard title

165.2
165
2

☐ Vessel specific
☒ Survey specific

Ecologic association.

Hazard assessment

Association ecologist are present in Australia sea.
They can stop the survey, or disturb the operations.
Accidents can occurred.

Escalating factors

No information given to the seismic crew.
Provocation. Inconsciensous acts.
Spillage. Crash streamer.

Recovery

Emergency plan.

Additional controls

- Use Solid streamer "more environment friendly"
- Maritime Mammal watchers are in board.
- Maririme Mammal gun procedure are done in accordance to the regulation.

New hazard rating

B3

New area rating

MEDIUM

Reviewing

By S LAIGRE

Date 07/02/2008

Project / Vessel data

PACIFIC TITAN
SEBOA - 2008
Consortium Members

Specific hazard code 402.1
hazard code cat 3 402
hazard number 1
Hazard title Vehicle

☐ Vessel specific
☒ Survey specific

Hazard assessment	Transport by car is used during transfert the people on shore (Hotel/airport/port). The risk of accident of vehicle control is present. Third party traffic can be responsible of this type of accident .
Escalating factors	Bad weather. Poor visibility. Driving by night. Acoohol, drug. Lack of training. Deficient subcontractor. Bad condition of the vehicle. Overspeed. Bad road.
Recovery	Local emergency Medevac. First aid kit. communication by phone.
Additional controls	- Selection of the subcontractor by the VOM. - Audit to be performed prior the survey
New hazard rating	B4
New area rating	MEDIUM HIGH
Reviewing	By S LAIGRE Date 07/02/2008

Project / Vessel data

PACIFIC TITAN
SEBOA - 2008
Consortium Members

Specific hazard code 412.1
hazard code cat 3 412
hazard number 1
Hazard title Capsizing

☐ Vessel specific
☒ Survey specific

Hazard assessment

Boat not suitable for encountered conditions (rough sea, stem wave).
Uneven weight distribution.
Small Boat colliding with seismic equipment (tow ropes , tail buoys).Overloaded boat.
No passenger discipline on board of small craft. Panicking in emergency. Equipment loss / pollution.

Escalating factors

Load not secured during transfert. Inexperience as coxwain.
No tool box meeting before WB operation. No application of procedure. bad weather. Emergency operation.
Unsafe act. Precipitation.
Lack of maintenance. No PPE. MOB

Recovery

Emergency procedures. Clinc and paramedic available on board.

Additional controls

- No work boat operation during the absence of chase boat.
- Workboat policy.
- Worboat is equipped of screen position system.
- Experimented coxwain.
- Tool box meeting are performed before the operation.
- Application of the MOPO.

New hazard rating

B3

New area rating

MEDIUM

Reviewing

By S LAIGRE

Date 07/02/2008

Project / Vessel data

PACIFIC TITAN
SEBOA - 2008
Consortium Members

Specific hazard code
hazard code cat 3
hazard number
Hazard title

417.1

417

1

Man Over board

☐ Vessel specific
☒ Survey specific

Hazard assessment

Personnel accidentally falling into water.
Multiple MOB.
No adequate protection from falling overboard (guard rails, hand holds, harnesses / open slipways).
Vessel life saving appliances not maintained in a state of readiness at all time.

Escalating factors

Failure to wear PFD. Unconscious. Cold water. Rough sea / strong current. Poor visibility. Lack of training on first aid, overboard rescue, use of emergency equipment. Personnel ignorant of basic principles of survival in the water. No swim test before being exposed to water operations. MOB boat or FRC not ready or used for another purpose.

Recovery

MOB emergency procedure.

Additional controls

- Painted line on gun deck (mandatory to wear life vest when no rail in place)

New hazard rating

B3

New area rating

MEDIUM

Reviewing

By S LAIGRE

Date 07/02/2008

Project / Vessel data

PACIFIC TITAN
SEBOA - 2008
Consortium Members

Specific hazard code
hazard code cat 3
hazard number
Hazard title

418.1

418

1

No chase boat available

☐ Vessel specific
☒ Survey specific

Hazard assessment

The chase boat becomes operationally unavailable for normal duties for any reason.
Pacific Titan must continue the production without any supply vessel.

Escalating factors

Obstacles; Close approach; Fishing activities; Work boat operation; Crash; fog;

Recovery

Emergency procedures.

Additional controls

- No close approach during the absence of Escort vessel
- Avoid the fishing activities area.
- No work boat operation during the absence of chase boat.
- Particular attention from the OOW on the bridge for fishing or cargo activities
- Source prior the survey a suitable chase vessel in addition to the support vessel

New hazard rating

B3

New area rating

MEDIUM

Reviewing

By S LAIGRE

Date 07/02/2008

Project / Vessel data

PACIFIC TITAN
SEBOA - 2008
Consortium Members

Specific hazard code
hazard code cat 3
hazard number
Hazard title

475.1

475

1

Disturbing fauna

☐ Vessel specific
☒ Survey specific

Hazard assessment

Vessel activity, noise and disturbance from sources, may disturb fauna, including fishes and cetaceans or other marine mammals.

In addition, some animals might be entangled and killed by seismic cable.

Escalating factors

Migrating season. Fire. Cold climates. No application of the Mammal procedure. No Maritime mammal watchers. Bad visibility. No compliance with Australian Regulations. Ignorance.

Recovery

Report all incident.

Additional controls

- Maritime Mammal watchers are in post on the bridge before and during the production.
- Soft start procedure is done.
- Dedicated MMO on board Titan.
- Experienced Australian marine crew (who should be familiar with regulatory requirements)

New hazard rating

A5

New area rating

MEDIUM

Reviewing

By

S LAIGRE

Date

07/02/2008



HAZARD REGISTER - CREW SPECIFIC DATA

Client logo

Project / Vessel data

PACIFIC TITAN
SEBOA - 2008
Consortium Members

Specific hazard code
hazard code cat 3
hazard number
Hazard title

477.1

477

1

Damaging constructions, installations in vicinity

☐ Vessel specific
☒ Survey specific

Hazard assessment

Possible collision with offshore installations.
Streamers caught around offshore installations.

Escalating factors

Fast current. Bad weather. No close approach procedure. No visibility. Steering failure. Engine failure. Spectra failure.
Navigation Human behaviour.

Recovery

Emergency plan.

Additional controls

- Close approach procedure applied, and people trained.
- Communication with the fixed installations.

New hazard rating

D2

New area rating

MEDIUM

Reviewing

By S LAIGRE

Date 07/02/2008