

**LISNAVE IS A COMPANY OF REFERENCE IN THE  
INTERNATIONAL NAVAL MAINTENANCE AND REPAIR MARKET**



## LISNAVE IS A SHIPYARD DEDICATED TO:

- **Ship repairing**

- **Dangerous cargoes ships**

- ✓ Crude oil tankers; LNG; LPG, OBO, OO, Chemicals; others

- **No dangerous cargoes ships**

- ✓ General cargo ships; Passenger ships; Container ships, Roro ships; Dredgers; others

- **Ship conversions**



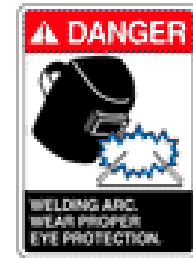
## SHIP REPAIR ACTIVITIES HAVE SEVERAL HAZARDS/RISKS

- **Dangerous atmospheres in enclosed spaces**
  - *Suffocation, poisoning ... DEATH....*
- **Fires/Explosions**
- **Spillages**
- **Slips, trips and falls**
  - *Fall from heights....severe consequences*
- **Struck by or against objects**
- **Dropping objects**
- **Exposures to: electricity, chemicals, noisy, air compressed, steam, dust, mists.....**



## SOME MAIN HAZARDS

- Hot Works (welding, cutting, grinding...)
- Enclosed spaces entry (cargo, ballast, bunker tanks)
- Height works (Erecting scaffoldings, ladders, masts...)
- Flat openings (floor openings, manhole covers, gratings...)
- Manual cargo handling
- Mechanical cargo handling (Use of cranes, chain blocks, wire ropes...)
- Chemicals (washing, degreasing with solvents, great blasting, painting...)
- Housekeeping (Scaffolding items, hoses, cables, pipes, machineries, scrapping...)
- Cleanliness (cargo residues, plastics, papers...)



**LISNAVE HAS A SAFETY ORGANIZATION AND SAFETY PROCEDURES AND RULES TO FACE REFERRED HAZARDS/RISKS:**

❑ **Safety Organization Summary**

- Company Safety Department.
- **Company Fire Brigade.**
- Gaslimpo (Independent Chemist Company certified by Port and National Authorities)
- Sagies (Independent Company certified for Hygiene and Health at the yard and operating the Health Centre)
- Prosegur (Independent Security Company)



❑ *All these companies are coordinated by Lisnave Management and subject to Lisnave specific Policies and Manuals*

**LISNAVE HAS A SAFETY ORGANIZATION AND SAFETY PROCEDURES AND RULES TO FACE REFERRED HAZARDS/RISKS:**

□ **Procedures and Rules Summary**

- Health and Safety Policy
- Health and Safety Procedures
- Internal Safety Standards
- Work Permission System
- Hazardous/Risks Manual (risk assessment procedures and basic tables)
- Internal Safety Information





## LEGISLATION AND REGULATION FOLLOWED

### □ EXTERNAL

- **Portuguese and European Legislation and Regulation related to Health and Safety**
- **Portuguese and European Standards**
- **OCIMF** - Oil Companies International Marine Forum -Shipyard Safety
- **ISGOTT** - International Safety Guide for Oil Tankers & Terminals
- **IMO** – code - International Maritime Organization
- **ACGIH** - American Conference of Governmental Industrial Higienists
- **ISPS** – International Shipping and Port Facilities Security Code
- **Clients Requirements** - whenever not covered by the International or EU regulations.



## LEGISLATION AND REGULATION FOLLOWED

### □ INTERNAL

- **Health and Safety Policy**
- **Quality Manual/Quality Procedures**
  - ✓ Procedure PGQ 16 – Accident Prevention and Safety
  - ✓ Procedure P 10 – Safety and Health Management
- **Lisnave Standards**
- **Manual of the Prevention and Safety Technical Procedures**
- **Manual of Identification and Control and Mitigation of Hazards**
- **Internal Informations regarding the HS matters**



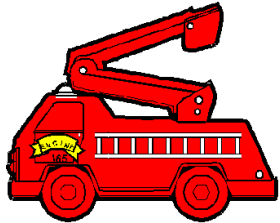


## LISNAVE SAFETY ORGANISATION

### □ SAFETY DEPARTMENT

- **Has a staff certified by national authorities**
  - **Safety manager / General safety co-ordinator / Safety technicians**
- **Assure and coordinate safety on the shipyard regarding:**
  - **Local hazards identification and risk assessment**
  - **Risk prevention at work sites (elimination and/or control)**
  - **Work permits issuing**
  - **Accident investigation, statistics and reports**
  - **Promote of safety information and training**
  - **Co-ordination the safety activities in all external companies that participate on the yard activities**





## LISNAVE SAFETY ORGANISATION



### □ FIRE BRIGADE

- **Has certified manager, supervisors and firemen**
  - **Lisnave and employed subcontractors professional firemen are full fire fighting and first aid trained personnel**
  - **Firemen are equipped with the necessary means for fire watching, fire fighting and rescuing operations**
  - **Assure the general fire watching aboard ships and hot work assistance.**
  - **Provide the first aid to the individual that have suffered an accident.**
- **An ambulance with permanent driver is in attendance at the Fire brigade Shipyard headquarters.**



## LISNAVE SAFETY ORGANISATION



### □ **GASLIMPO (Chemist company)**

- **It is an independence company duly certificated by Port and National authorities**
- **Has:**
  - **Gas inspector manager, supervisor and chemist technicians;**
  - **Certificated gas searching apparatus duly calibrated and certified procedures for its control;**
  - **Issues a gas free certificate required prior to entry into shipyard, a daily gas free certificate and hot work permits on the ships that carry dangerous cargoes in any enclosed space and connected items (pipe lines, pumps, valves, etc.)**



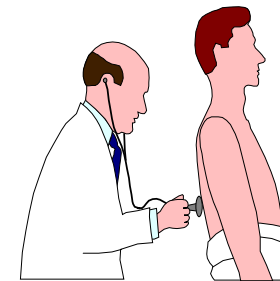
## LISNAVE SAFETY ORGANISATION



Pronto Socorro

### □ **SAGIES** (Health centre)

- It is an independent company that provides health and hygiene services
  - Having permanent nurses at yard during 24 hours. A doctor is in attendance during day shift;
  - Granting medical assistance to all the yard workers and other individuals when required;
  - Carrying out medical inspections to the yard workers and subcontractors.



## LISNAVE SAFETY ORGANISATION

### □ PROSEGUR (Security Service)

#### ➤ It is an independent company

- Has security supervisors and inspectors
- Provides the surveillance and controls the access to the shipyard.
- Controls movements of personnel, equipments and materials at yard main gates.
- Carry out rounds in all yard.
- The entry of potentially hazardous materials will only be allowed after permission by Safety Department.
- Is an important part of the ISPS code control



## LISNAVE SAFETY ORGANISATION

- **Yard Safety officer - Has a green band in his white helmet with the sentence - SAFETY TECHNICIAN – TÉCNICO DE SEGURANÇA**
- **Chemist Safety officer - Has a blue band in his white helmet with the sentence - GAS INSPECTOR - QUÍMICO**



## LISNAVE SAFETY ORGANISATION

- Firemen – They have a red band in their white helmets and wear red suits with the word **FIREMAN** (on their back)
- They use normal PPEs and also have individual whistle to be used for local alarm





## FIREMEN ASSISTANCE ABOARD – GENERAL RULE

➤ **In Ships with yard/subcontractors/crew work on progress**

- A fireman will stay aboard as general fire prevention and watching.
- Additional firemen will be employed for local hot work assistance, depending on risk analysis made by safety technicians/chemists.



➤ **In Ships without any kind of work on progress particularly during night period (00h00 to 08h00) or at week end.**

- A fire patrol performs a regular ship inspection

## MEETINGS ON BOARD OF VESSELS

- Safety and Production meetings scheduled for ship repairing are:
  - On arrival of the vessel, a Safety Kick Off Meeting will be arranged by the yard ship Project Manager with the ship's representatives (Superintendent, Captain, Chief Officer, Ship Engineer and other crew members).
  - A Daily Yard Safety/Production meeting with the presence of the yard Project Manager and safety/production team.
  - A Daily Safety/Production meeting with the presence of the yard Project Manager and the ship's representatives.





## JOB SAFETY ANALYSIS



- Identification Hazards are made regularly during the daily inspection carried out by safety technicians at the work sites.
- Before starting any activity on board a risk analysis is developed by safety technicians/chemists with the assistance of project manager team and supervisors in charge with the work to be carried out.
- There are a permit to work system used as preventive and control measures.
- Safety technicians may stop any work which he may find is being performed with an unacceptable safety risk

## WORK PERMISSION SYSTEM



- **Ship access – by using individual identification cards**
- **Enclosed space safe entries (Gas free certificate)**
- **Hot work permits**
- **Scaffolding approval**
- **Shot blasting and painting operations in confined spaces**
- **Use of danger substances aboard ship (ex. Solvents)**
- **Lockout/Tag out for energy systems (ex. electrical works, remote control of cargo and ballast tanks valves, ruder, radars, and so on)**
- **Bunkering, transferring of oil or other substances to ship**
- **Other danger activities**

**HOT WORK PERMIT FORMS**

**Yard Safety Department form**

**Yard safety officer issues hot work permits:**

- In dangerous cargo ships – in open areas, such as: engine room, superstructure and main deck.
- In no dangerous cargo ships – all over the ship.

**Chemist Company (Gaslimpo) form**

**Chemist officer issues hot work permits:**

- In dangerous cargo ships – in enclosed spaces and connected items (pipe lines, pumps, valves, etc.)
- In no dangerous cargo ships – if required by client or Safety Department.

## GAS FREE CERTIFICATE



- All vessels coming into the yard, that have carried dangerous cargoes, are only authorized to enter the yard if they first have be certified Gas Free by the Competent Entity/Chemist company
- Such gas searching certificate must show safe values for entry in the shipyard premises
- A Gas Free certificate is in principle valid for 24 hours
- A new certificate must issued even if the 24 hours validity period has not ended if any alteration has occurred that may cause changes in the confined space



**GAS FREE CERTIFICATE FORM**

**D.P.A. Gaslimpo**  
CERTIFICADO DE DESGASEIFICAÇÃO (GAS-FREE CERTIFICATE) Nº 1184 / 33

NAVIO: SILLIO TITULO: TAREFE:

18. REMARCAÇÕES (LAST REMARKS): ERETEC: 018

LOCAL DA INSPECÇÃO (INSPECTION PLACE): CRUZ 88

CRUZ: a) Fachada (Barriga, Abos, Entree) b) Lanteira c) Barragem Química Pequena estacionada com o aparelho marca Contador modelo 1314 nº F0278 Aut. nº 02, 03, 14, 23, 25 e 52 - com

a) Cabide (Barriga, Abos, Entree) b) Ballast c) Chemical washing Tank carried out with meter Contador modelo 1314 nº F0278 Aut. nº 02, 03, 14, 23, 24, 25 and 52 - on main deck

**LEGENDA:**  
1 - Não tem gases nocivos para a saúde humana.  
2 - Não tem gases nocivos para a saúde humana e para o meio ambiente.  
3 - Não tem gases nocivos para a saúde humana e para o meio ambiente e para a vida marinha.  
4 - Não tem gases nocivos para a saúde humana e para o meio ambiente e para a vida marinha e para a vida aquática.

ÚLTIMA DATA DE TAREFA COMPLETADA (LAST WORK PERIOD) nº 52  
DATA (DATE) 2007, 05, 09 AT 15, 40

INSPEÇÃO DE CRUZ (INSPECTION) [Signature]

**Gaslimpo**  
CERTIFICADO DE DESGASEIFICAÇÃO (GAS-FREE CERTIFICATE)

**1.º - GASES**  
NÃO TEM GASES  
- NÃO TEM GASES  
- NÃO TEM GASES

**2.º - GASES INERTES**  
NÃO TEM GASES INERTES  
- NÃO TEM GASES INERTES  
- NÃO TEM GASES INERTES

**3.º - GASES TÓXICOS (TRABALHOS ESPECIAIS)**  
NÃO TEM GASES TÓXICOS  
- NÃO TEM GASES TÓXICOS  
- NÃO TEM GASES TÓXICOS

**4.º - NÃO TEM GASES - PODE-SE TRABALHAR - PODE-SE FAZER FOGO**  
NÃO TEM GASES  
- NÃO TEM GASES  
- NÃO TEM GASES

**5.º - NÃO TEM GASES - PODE-SE TRABALHAR - PODE-SE FAZER FOGO (EM CONDIÇÕES ESPECIAIS)**  
NÃO TEM GASES  
- NÃO TEM GASES  
- NÃO TEM GASES

**6.º - GASES PERIGOSOS PARA A SAÚDE HUMANA**  
NÃO TEM GASES PERIGOSOS PARA A SAÚDE HUMANA  
- NÃO TEM GASES PERIGOSOS PARA A SAÚDE HUMANA  
- NÃO TEM GASES PERIGOSOS PARA A SAÚDE HUMANA

**7.º - GASES PERIGOSOS PARA O MEIO AMBIENTE**  
NÃO TEM GASES PERIGOSOS PARA O MEIO AMBIENTE  
- NÃO TEM GASES PERIGOSOS PARA O MEIO AMBIENTE  
- NÃO TEM GASES PERIGOSOS PARA O MEIO AMBIENTE

**8.º - GASES PERIGOSOS PARA A VIDA MARINHA**  
NÃO TEM GASES PERIGOSOS PARA A VIDA MARINHA  
- NÃO TEM GASES PERIGOSOS PARA A VIDA MARINHA  
- NÃO TEM GASES PERIGOSOS PARA A VIDA MARINHA

**9.º - GASES PERIGOSOS PARA A VIDA AQUÁTICA**  
NÃO TEM GASES PERIGOSOS PARA A VIDA AQUÁTICA  
- NÃO TEM GASES PERIGOSOS PARA A VIDA AQUÁTICA  
- NÃO TEM GASES PERIGOSOS PARA A VIDA AQUÁTICA















## GAS HAZARD CONTROL

- Gas free certificates and hot work permits are posted on board **near yard gangway**



- Color card stamped at a cargo **tank hatch cover**

Ex. Blue card - In that case the enclosed space is classified as **Safe For Men Not Safe For Fire (blue card)**



## SCAFFOLDINGS



- Scaffolding must be erected according specific yard and national safety rules
  - Scaffolds workers must use safety harness
- Scaffolds must be prior approved by a yard safety technician before they are used by the workers – a tag will be attached
- If the scaffolding become unsafe than a label may be displayed by the yard safety technician prohibiting the use of such scaffold



## SCAFFOLDINGS – APPROVAL DOCUMENT

**LISNAVE** ESTALEIROS NAVAIS, S.A.

Documento de Aprovação do Tanque N.º 283  
Navio COLUMBIA  
SPRINT

NOTA: Esta comprovação atesta que no momento da inspeção o tanque estava de acordo com as normas de segurança.

APROVAÇÃO	HORA E DIA	SIM / NÃO	RESPONSÁVEL PELA MONTAGEM	RESPONSÁVEL PELA UTILIZAÇÃO DO ANDAIME	OBSERVAÇÕES
* ANDAIMES	29/07/03 14h55		<i>Victor</i>	<i>Victor</i> 28/03	Andaime Adjacente à Antena de Vante para a caldeiraria
ILUMINAÇÃO					
VENTILAÇÃO					

\* Os andaimes aprovados não podem ser alterados nas suas estruturas sem autorização dos Serviços de Prevenção.


DI. TEC. DE PREVENÇÃO  
*Victor*



**SCAFFOLDINGS TAGS**


**APPROVAL TAG**

*After scaffolding approved the yard safety officer will post this white tag*

 DEPARTAMENTO DE PREVENÇÃO DE ACIDENTES / SAFETY DEPARTMENT ESTALEIROS NAVAIS, S.A. <b>APROVAÇÃO DE ANDAIMES / SCAFFOLDING APPROVAL</b>			
NAVIO / SHIP	LOCAL / LOCATION	DATA / DATE	HORA / HOUR
<p><b>ATENÇÃO CAUTION</b></p>  <p><b>ANDAIME APROVADO APPROVED SCAFFOLDING</b></p>		<p>→ AS ALTERAÇÕES OU AS MODIFICAÇÕES DEVEM SER FEITAS POR PESSOAL TREINADO. DE OUTRO MODO PODEM TORNAR O ANDAIME INSEGURO.</p> <p>→ COMUNICAR AS CONDIÇÕES INSEGURAS.</p> <p>→ ALTERATIONS OR MODIFICATIONS MUST BE CARRIED OUT BY TRAINED PEOPLE OTHERWISE THE SCAFFOLDING MAY BECOME UNSAFE.</p> <p>→ UNSAFE CONDITIONS TO BE COMMUNICATED.</p>	
UTILIZADOR USER	CHEFE DOS ANDAIMES SCAFFOLDING FITTER	TÉCNICO DE PREVENÇÃO SAFETY OFFICER	

**UNSAFE TAG**

*If scaffolding is unsafe the yard safety officer will post this yellow tag*

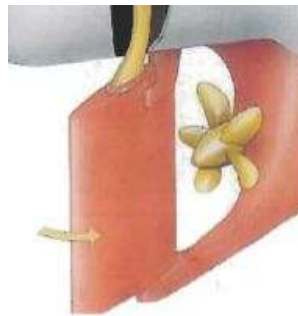
 DEPARTAMENTO DE PREVENÇÃO DE ACIDENTES / SAFETY DEPARTMENT ESTALEIROS NAVAIS, S.A. <b>REPROVAÇÃO DE ANDAIMES / NOT APPROVED SCAFFOLDING</b>			
NAVIO / SHIP	LOCAL / LOCATION	DATA / DATE	HORA / HOUR
<p><b>PERIGO DANGER</b></p>  <p><b>ANDAIME INSEGURO UNSAFE SCAFFOLDING</b></p>		<p><b>ATENÇÃO CAUTION</b></p>  <p><b>NÃO UTILIZAR NOT TO BE USED</b></p>	
TÉCNICO DE PREVENÇÃO SAFETY OFFICER			

**LOCK OUT/TAG OUT SYSTEM**

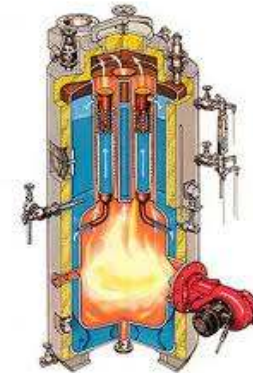
- Is applied in **SOURCE POWERED SYSTEMS AND OR EQUIPMENT'S**, such as:
  - **Radar;**
  - **Propeller or rudder;**
  - **Cargo, bunker, ballast or stripping tanks valves;**
  - **Boiler;**
  - **Electrical equipment's.**



MA/JC



Safety Induction


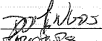

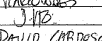
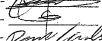


LOCKOUT/TAGOUT- LABEL AND DEVICES





**LOCKOUT/TAGOUT FORMS**

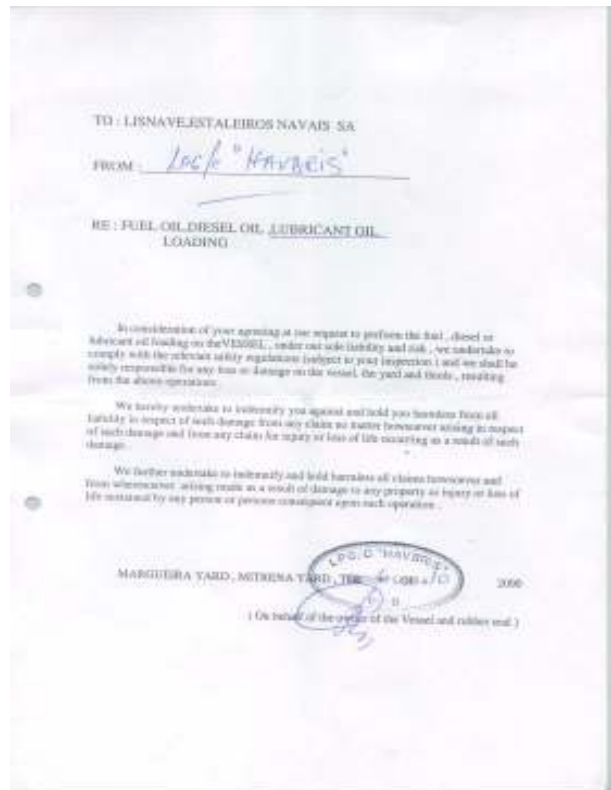
	<b>Safety Department/Prevenção e Segurança</b>
<b>Lockout/Tagout request/Pedido de Travamento/Etiquetagem</b>	
VESSEL'S NAME/NOME DO NAVIO: <u>MARSA ROLAN</u>	
<p>To ensure safety of workers/crew members/others it is requested that the under mentioned machinery/equipment must be kept in off position; De modo a garantir a segurança dos trabalhadores/tripulantes/outros é requerido que a maquinaria / equipamento abaixo mencionado se mantenha desligado:</p>	
<input checked="" type="checkbox"/> Rudder <input type="checkbox"/> Propeller <input type="checkbox"/> Thrusters <input type="checkbox"/> Radar <i>Leme Hélice Hélices manobra Radar</i>	
<input type="checkbox"/> Other (machinery/equipment description): <i>Outro (descrição da maquinaria/equipamento):</i> _____	
<p>For this propose the power/energy supply shall be removed/ disconnected / isolated by the appointed Responsible Ship's Officer and sealed /tagged. Para este propósito a fonte de energia deve ser removida/desligada/isolada pelo Oficial Responsável designado pelo Navio</p>	
<p>Removing of seal and tag can only be done with Yard Safety Officer permission after a proper work sites inspection in order to confirm that no works are in progress and workers and equipments are positioned safely. A remoção do selo e da etiqueta somente pode ser feita com a autorização do Técnico de Segurança do estaleiro depois duma inspeção ao local de trabalho de modo a confirmar que não estão trabalhos a decorrer e os trabalhadores e equipamentos estão numa situação segura</p>	
<b>1 - APPLICATION OF LOCKOUT/TAGOUT / APLICAÇÃO DO TRAVAMENTO/ETIQUETAGEM</b>	
<p>The power/energy source of above mentioned machinery/equipment was removed /disconnected / isolated and sealed and tagged on _____ (DATE/DATA) A fonte de energia da maquinaria / equipamento mencionado acima foi removida / desligada / isolada e selada e etiquetada em _____ (HOUR/HORA)</p>	
Yard Requester / Responsável do Pedido/estaleiro	
Yard Project Manager / Gestor do Projecto	
Vessel Responsible / Responsável do Navio	
Yard Safety Officer / Técnico de Segurança	
(NAME/NOME - SIGNATURE/ASSINATURA)	
<b>2 - REMOVAL OF THE LOCKOUT/TAGOUT/REMOÇÃO DO TRAVAMENTO/ETIQUETAGEM</b>	
<p>The lockout / tagout of the above mentioned machinery/equipment was removed and the power/energy source was connected on _____ (DATE/DATA) O travamento / etiquetagem da maquinaria / equipamento mencionado acima foi removido e a fonte de energia foi ligada em _____ (HOUR/HORA)</p>	
Yard Requester / Responsável do Pedido/estaleiro	_____
Yard Project Manager / Gestor do Projecto	_____
Vessel Responsible / Responsável do Navio	_____
Yard Safety Officer / Técnico de Segurança	_____
(NAME/NOME - SIGNATURE/ASSINATURA)	
Safety Department - Lockout/Tagout Request /Prevenção e Segurança - Pedido de Travamento/Etiquetagem V1	

			
<b>LOCKOUT / TAGOUT</b>			
<b>SHIP'S CARGO-HYDRAULIC SYSTEM</b>			
<p>To ensure safety of workmen/crew members, machinery and equipment on cargo deck in other confined spaces where "Hot Work" are carried out, hydraulic systems must be kept in the "OFF" position. For this purpose, valves of connections between hydraulic motors must be removed by Captain's appointed officer or Ship's Safety Officer.</p>			
<p>This task must be maintained closed and sealed with the appropriate Lock Out device prior to starting of work. Such device may consist of:</p>			
<ul style="list-style-type: none"> <li>A wire locking the bar raised by 2 padlocks</li> <li>A sticker signed by the appointed person.</li> </ul>			
<p>A set of the padlocks keys will be kept in Captain's (or Appointed Officer) and in Chief/Yard Safety Officer's possession.</p>			
<p>The seal can only be removed after the end of all hot works inside cargo holds, or other identified spaces by Chief/Yard Safety Officer's.</p>			
<p><b>No tests, filling or flushing of lines or other operations as foreseen</b> <b>by Lisnave Safety Rules, can be carried out in the meantime.</b></p>			
<p>Removing of seals can only be done with Chief's/Yard Safety Officer's permission after a proper security of work sites to confirm that no hot work is still in progress.</p>			
<b>1 - APPLICATION OF THE LOCKOUT (TAG OUT) DEVICE</b>			
<p>I confirm that the hydraulic system was placed out of service and the task (s) tag out device was fixed on the _____ of _____ at _____ hours.</p>			
<ul style="list-style-type: none"> <li>Yard's Safety/LOTO Officer: _____ Position: _____ Signature: _____</li> <li>Chief/Yard Safety Officer: _____ Signature: _____</li> <li>Project Manager: _____ Signature: _____</li> </ul>			
<b>2 - REMOVAL OF THE LOCKOUT (TAG OUT) DEVICE</b>			
<p>The task (s) tag out device was removed and the hydraulic system was returned / reactivated on the _____ of _____ at _____ hours.</p>			
<ul style="list-style-type: none"> <li>Yard's Safety/LOTO Officer: _____ Position: _____ Signature: _____</li> <li>Chief/Yard Safety Officer: _____ Signature: _____</li> <li>Project Manager: _____ Signature: _____</li> </ul>			



## BUNKERING / FUEL OIL / LUBRICANT OIL / NITROGEN LOADING

- A responsibility term must be signed beforehand by ship's responsible.
- No hot work in entire ship and yard surrounding vicinity area is allowed





## STOPPAGE OF THE WORK FORM

- Yard safety technician can, at any time and at his judgement stop any work which he find is being performed with an unacceptable safety conditions/risk

**LISNAVE**  
PREVENÇÃO DE ACIDENTES  
SAFETY DEPARTMENT

**PARAGEM DE TRABALHO**  
STOPPAGE OF WORK

CLASSE DE RISCO E SEVERIDADE  
SAFETY FIRST!

Nome: *LILLO*

LOCAL DE TRABALHO  
LOCAL: *Beira Lago Est. Navais (Buzios)*

DATA E HORA  
23.05.2004  
13:20 u

ATIVIDADE  
*STEEL-TEE*

CONDICÃO DE TRABALHO  
*Trabalho na área externa sem proteção*

COMENTÁRIOS  
*Tôj que as colocações fôrtaças são  
se avanta o trabalho.*

UNIDADES DE RISCO

1. TRABALHOS EM ALTURA (3380)	8. TRIPRECAL EQUIPAMENTO	9. SENSIBILIZAÇÃO INDIVIDUAL INDIVIDUAL HYPER
2. USOS DE FERRAMENTAS EQUIPAMENTO	10. AUSÊNCIA DE MEIOS DE PROTEÇÃO Lack of extinguishing equipment	11. INFERIORS (TR) MANEJAMENTO EQUIPAMENTO (TR) MANEJAMENTO
3. FERRAMENTAS EQUIPAMENTO	12. AUSÊNCIA DE PROTEÇÃO Lack of protection	12. FALTA DE PROTEÇÃO Lack of protection
4. FALTA DE VERIFICAÇÃO Lack of verification	13. FALTA DE VERIFICAÇÃO Lack of verification	13. FALTA DE VERIFICAÇÃO Lack of verification

**ANOMALIA DETECTADA**

Em 23/05/2004 às 13:20 u

Por: *Lilillo*

Assinatura: *Lilillo*

## PPEs RECOMMENDED



### ➤ **RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT TO BE ALWAYS USED**

- **Hard hats - helmets**
- **Safety boots**
- **Suits**

### ➤ **RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT TO BE USED WHERE REQUIRED BY RISK ASSESSMENT**

- **Eye protection ( recommended in many cases)**
- **Safety gloves ( type to be defined by the risk involved)**
- **Ear protectors (the noise will be high in some areas)**
- **Respiratory masks (dust, fumes, toxic vapours or gases may exist in the airborne)**
- **Safety Harness (work more than 2 metres high)**
- **Others in accordance with the risk/activity**



## SAFETY TRAINING



- All the subcontractor firms' employees and clients employees (if required) before starting any work on the Shipyard are trained and informed, by the Prevention and Safety Department, about the Lisnave Safety standards, rules and procedures.
- At least every year the subcontractors are refreshed.
- Annually in a professional school in Yard premises (Solisform) there are several courses such as; fire fighting, first aids, hygiene and safety, rigging/maneuvers, supervising and so on. Lisnave employees are trained in these courses.

## SECURITY AND ENVIRONMENT

### ➤ SECURITY

- ✓ Lisnave is a certified yard by the ISPS code and has a PFSO certified by national authorities.
- ✓ All private and public vehicles and baggage will be subjected to security check at main gate during movement in/out the yard.
- ✓ **Yard is subjected to close circuit TV (CCTV)**



### ➤ ENVIRONMENT

- ✓ Lisnave has a Certified Environmental Department with an environmental manager.
- ✓ Adequate recipients will be placed providing separate disposal of garbage.
- ✓ Hazardous wastes should only be disposed in approved recipients.
- ✓ **The removal of the garbage/hazardous wastes are carried out by certified companies following appropriate laws.**



## EMERGENCY ORGANIZATION

- The yard has an Internal Emergency Plan where is described the emergency procedures and measures to face:

➤ **SERIOUS ACCIDENT**

➤ **FIRE/EXPLOSION**

➤ **SPILLAGES**



## EMERGENCY ORGANIZATION



### ➤ Yard emergency team

- In case of accident with high severity will be assumed by Emergency Director
- In case of low severity accident will be assumed by the most graduated fireman – usually one firemen supervisor
- In any case the severity of the situation must than be evaluated by both ship and yard emergency responsible persons and coordinated measures accorded
- In serious situations the external firemen and ambulances will be available

### ➤ Assistants

- Project managers/general yard managers
- Safety technician/Chemists
- Electricians
- First aid trained workers
- Crane operators







## EXTERNAL EMERGENCY ENTITIES

- Hospital is in Setúbal city, about 12 km and 10 minutes away from the yard
- Ambulances and medical assistance from the National Medical Emergency Service (INEM in Portuguese) is also available in Setúbal
- The stations of fulltime Professional Fire Services and the Voluntary Fire Services are near Setúbal, about 10 minutes away from the yard.
- If required they will be called by the yard fire brigade or management

## EMERGENCY - DRILL

