

# C O R P O R A T E   B R O C H U R E



## SEALORD DIVING & SALVAGE PVT. LTD.

MARINE SALVAGE

SUBSEA INTERVENTION & DIVING

MARINE CONSTRUCTION

HYDRO POWER PLANTS & DAMS

# COMPANY PROFILE

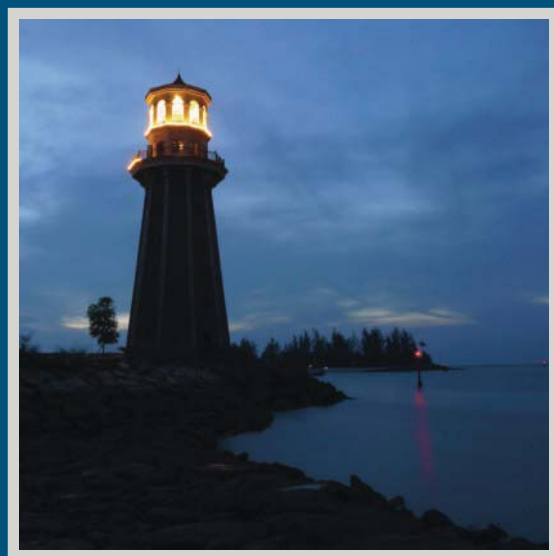
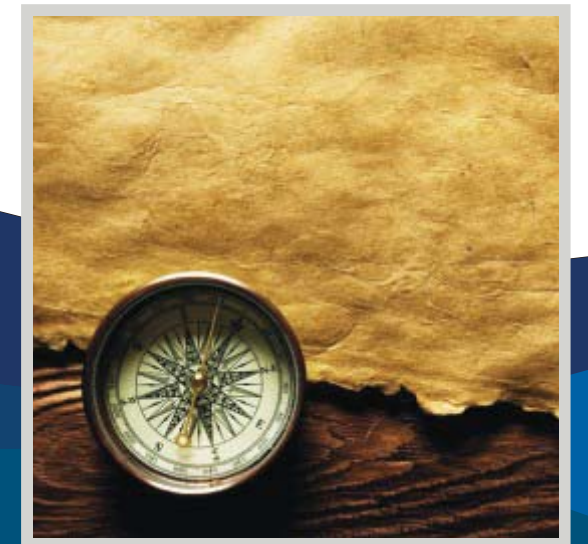
## INTRODUCTION

SEALORD is a dynamic company with substantial experience accumulated over the years. Created in 1994 with a humble beginning as SEALORD DIVING SERVICES (SDS), a small proprietorship enterprise to meet the needs of a market that demanded professionalism, safety and accuracy in interventions.

It soon differentiated itself by handling contracts that required high precision and expertise. Series of success in its operation led to a vibrancy in the organization which inspired it to diversify.

In 2006 the company matured into a private limited company and registered itself as SEALORD DIVING & SALVAGE PVT. LTD. (SDSPL). The Company committed itself to high service standards set precise parameters for its operations using advanced technology in the field of diving.

*Here People Dive Deep to Serve Better!*



## MISSION

SEALORD DIVING & SALVAGE PVT. LTD. wishes to be recognized as a proactive, safety conscious, service oriented, customer focused and a well managed company believing in Customer Relationship Management (CRM) and Corporate Social Responsibility (CSR) in the form of employee's welfare and care for the community in general.

## VISION

The company continues to grow and broaden its horizons, never losing sight of the attributes which brought it to this high pedestal of progress. It is committed to continue to attain the level of excellence expected by its valuable customers.

## CORPORATE OBJECTIVE

Deeply Committed To Excellence

SEALORD DIVING & SALVAGE PVT. LTD. (SDSPL) is a leading commercial diving company in the industry, with excellent safety record and unprecedented commitment to quality and safety. SDSPL rises above the competition due to its strong focus on proper gear, insurance policies and training procedures. The company has experienced a steady growth in both the onshore and offshore customer base. The company offers a variety of services including salvage, inspection, maintenance, construction and repair to variety of structures including ships and pipelines. As a result of its proactive management style, excellent reputation and innovative technology, SDSPL has great aspirations and confidence for its future growth and performance.

## RELIABLE SERVICES

The company provides a variety of inspections, salvage solutions, repair and maintenance services for offshore and onshore customers primarily in India. SDSPL utilizes a highly trained, professional workforce to provide an efficient and economical solution to customers. The company strives to hold sales, professionalism and principles of safety at the highest possible levels to achieve its goals.



# SERVICE PROFILE

## MARINE SALVAGE & WRECK REMOVAL

The core business & backbone of the company is our Marine Salvage & Wreck Removal capabilities. Marine salvage is the process of rescuing a ship, its cargo, or other property from peril. Salvage encompasses emergency support for saving sinking vessel, rescue towing, refloating a sunken or grounded vessel, or patching or repairing a ship. The oil pollutants, hydrocarbons or other contaminants are biggest environmental hazard. The recovery of these pollutants from sunken vessel is often considered a high priority.

Only Indian Salvage Company (fully functional) with maximum number of International & Domestic salvages to its credit. SDSPL has a record in India for carrying out at least one major salvage operation every year from her foundation year.

Rapid development & improvement in the field of salvage is the key to success for SDSPL. Highly qualified work force comprehensively involved in every salvage project from Initial planning to Final execution.

## S E R V I C E S

### Marine Salvage

### Wreck Removal

### Marine Emergency Response

This includes :

- Re-floating sunken vessels.
- Salvage of grounded & stranded vessels.
- Recovery of hydrocarbons & oil pollutants from sunken vessels.
- Recovery of cargo / valuable items from underwater &/or sunken vessel.
- Underwater welding & cutting.



Tugboat ground on south east coast of India.



Re-floating grounded tugboat 'MLC Nancy 3', off Mumbai, India.



Salvage of mini bulk carrier 'Essar AB IV', off Surat, Gujarat, India.



Stranded mini bulk carrier 'Nafisa - I', off Bhavnagar, Gujarat, India.

We provide chartered Salvage Masters, Experts, Superintendents, Naval Architects & Engineers and Supervisors especially for Salvage & Wreck removal projects.



## SUBSEA INTERVENTION & DIVING

Deep sea diving is the most well known branch of commercial diving, with divers working in support of the exploration and production sector of the oil and gas industry. The work in this area of the industry typically revolves around the maintenance of oil platforms, building of underwater structures used in the production process, installation, NDT survey, UWILD survey, inspection & survey with CCTV, general inspection, etc.

The deep sea diving is carried out as per U.S. Navy & IMCA standard diving procedures. Company has a separate section of Offshore Diving to carry out all types of inspection, maintenance & repairs to vessels & underwater structures by minimizing the risk factor and maximizing the quality output.

SDSPL has been actively involved with offshore diving services. SDSPL provides top quality equipment & workforce to client worksites in the following core competences:

- Surface demand diving services (air / nitrox / mixed-gas)
- Saturation diving services
- ROV services



Diving support for massive project of 'Dhirubhai Ambani 1 & 3' gas fields development, off Kakinada, A.P., India.



Diving support during Diffuser Installation for gas filed development project from Pipe lay barge 'Tug Mor', off Kakinada, A.P., India.

## S E R V I C E S

### Oil & Gas

Inspection, Maintenance & Repair (IMR) services of :

- **Platforms & Rigs**
- **Subsea & Offshore structure**
- **Seabed Infrastructure**

This includes :

- Pre & Post engineering surveys
- Spool installation
- J-tube/riser installation
- Tie-in of umbilicals
- Dome installation
- Subsea tree installation
- Pipeline protection installation
- Installation & Replacement of Jacket, Pipelines, Risers, Diffusers, Clamps & Conductors.
- Installation, Preservation & Maintenance of Offshore Oil Terminals, S.B.M and S.P.M.



One of the production platforms in Iran.



Search & Recovery of Remote Operated Vehicle (ROV).



## S E R V I C E S

### Shipping

**Underwater Inspection in Lieu of Dry Docking (UWILD) services of :**

- **Ships, Vessels & Marine Crafts**
- **Platforms, Rigs & Offshore structures**
- **Mobile offshore units**

This includes :

- UWILD surveys
- Underwater NDT Inspection using MPI, CP and UT devices.
- Underwater Inspection using Underwater Still Photography and Video Photography (CCTV).
- Underwater cleaning of marine growth using hydro pressure jets, hydraulic brush kart, etc.
- Underwater inspection, maintenance & repairs of ships and all types of sea going vessels.
- Hull & Propeller cleaning & polishing.
- Sealing of stern glands.
- Blanking of sea suction grating.
- Underwater repairs to any Structural Damage.



Ship damaged the shipyard's dry dock gates, Gujarat, India.



Diving support during Umbilical Installation for gas field development, off Kakinada, A.P., India.



Removal of hydrocarbon from sunken tugboat 'DCI Tug VI', off Nagapattinam, T.N., India.



Tugboats positioning the LNG vessel at one of the LNG terminals at Oman.



## Marine & Coastal Engineering Construction and Dredging & De-silting

Marine Construction Diving is the work often being in support of land based civil engineering projects, with the majority of the work either underwater survey or construction work. The number of dive sites and divers can be found working in harbours and / or sheltered waters.

Dredging & De-silting (Jet-lift & Air-lift)

Maintenance Dredging: Dredging to deepen or maintain navigable waterways or channels which are threatened to become silted with the passage of time, due to sedimented sand and mud, possibly making them too shallow for navigation. This is often carried out with a trailing suction hopper dredge. Most dredging is for this purpose, and it may also be done to maintain the holding capacity of reservoirs or lakes.

SDSPL owns Mini Crawl Cat Dredgers (2 nos.) & Backhoe Long Boom Dredger (1 no.) that can be used to maintain, expand and deepen areas that have progressively become shallow from deposits (silt, mud, sand, etc.). They are small and can be easily maneuvered in tight areas. The small dredgers feature a swinging ladder configuration so the dredge can work without external swing wires or anchors.

The jet-lift uses the Venturi effect of a concentrated high-speed stream of water to pull the nearby water, together with bed material, into a pipe.

An airlift is a type of small suction dredge handheld underwater by a diver. It works by blowing air into the pipe, and that air, being lighter than water, rises inside the pipe, dragging water along sand, silt, mud, etc. with it.

### S E R V I C E S

**Marine Construction | Harbour infrastructure, Quay walls, jetties and buoys | Coastal Engineering & Consultancy | Dredging & De-silting**

This includes :

- Underwater construction services.
- Complete Engineering, Installation and Commissioning of Pipeline & Cable laying projects.
- Installation & Replacement of anodes, fenders, bumpers, shock absorbers, etc.
- Underwater Survey, Inspection and Maintenance of Pipelines.
- Underwater inspection & survey using Still Photography & Video Photography (CCTV).
- Underwater Cutting & Welding of sheet piles, liners, reinforcement bars, etc.
- Underwater welding of u/w structures, pipelines, etc.
- Cofferdam installation & underwater concrete.
- Construction, Repair & Maintenance of Jetties, Ports, Breakwater, Harbour, etc.
- Construction & repairs of sea intakes and outfalls.
- Gabion & Block placement under bridges and intake canals.
- Underwater services for rock blasting and well sinking.
- Underwater corrosion resistant Epoxy coating, Grouting, Reinforcing & Concreting.
- Pressure pointing & grouting.
- Experts & Engineers for handling Anchor Mooring systems.
- Dredging of reservoirs, lakes, pounds.
- Dredging of tight corners of harbours & ports where big dredgers or their cutter heads cannot reach.



Intake Pipe laying, Altavela Power Project, Abu Dhabi.



Cable Reels for laying on barge 'STEMAT', off Kakinada, A.P., India.



Spud barges on marine construction site, Muscat.



Marine & Civil construction, Qalhat LNG Train 3 Project, Oman.



Temporary jetty constructed for loading, Qalhat LNG Train 3 Project, Oman.



## HYDRO POWER PLANTS, DAMS & INTAKE WELLS

As the name suggests 'Hydro' underwater diving services are required on contract basis on Hydro power plants/ dams. Penstocks for hydroelectric installations are normally equipped with a gate system and a surge tank. Flow is regulated by turbine operation and is nil when turbines are not in service. Maintenance requirements may include u/w inspection, survey, repairs, manual cleaning & de-silting, desiccation, etc.

There is lots of risk involved in underwater diving on hydro power plants / dams. The divers are often required to inspect and repair outfalls which require at times up to 50 mtr. to 500 mtr. plus penetrations, which require a multitude of safety requirements.

### S E R V I C E S

Inspection, Maintenance & Repair (IMR) services of :

**Hydro Power Plants & Dams**

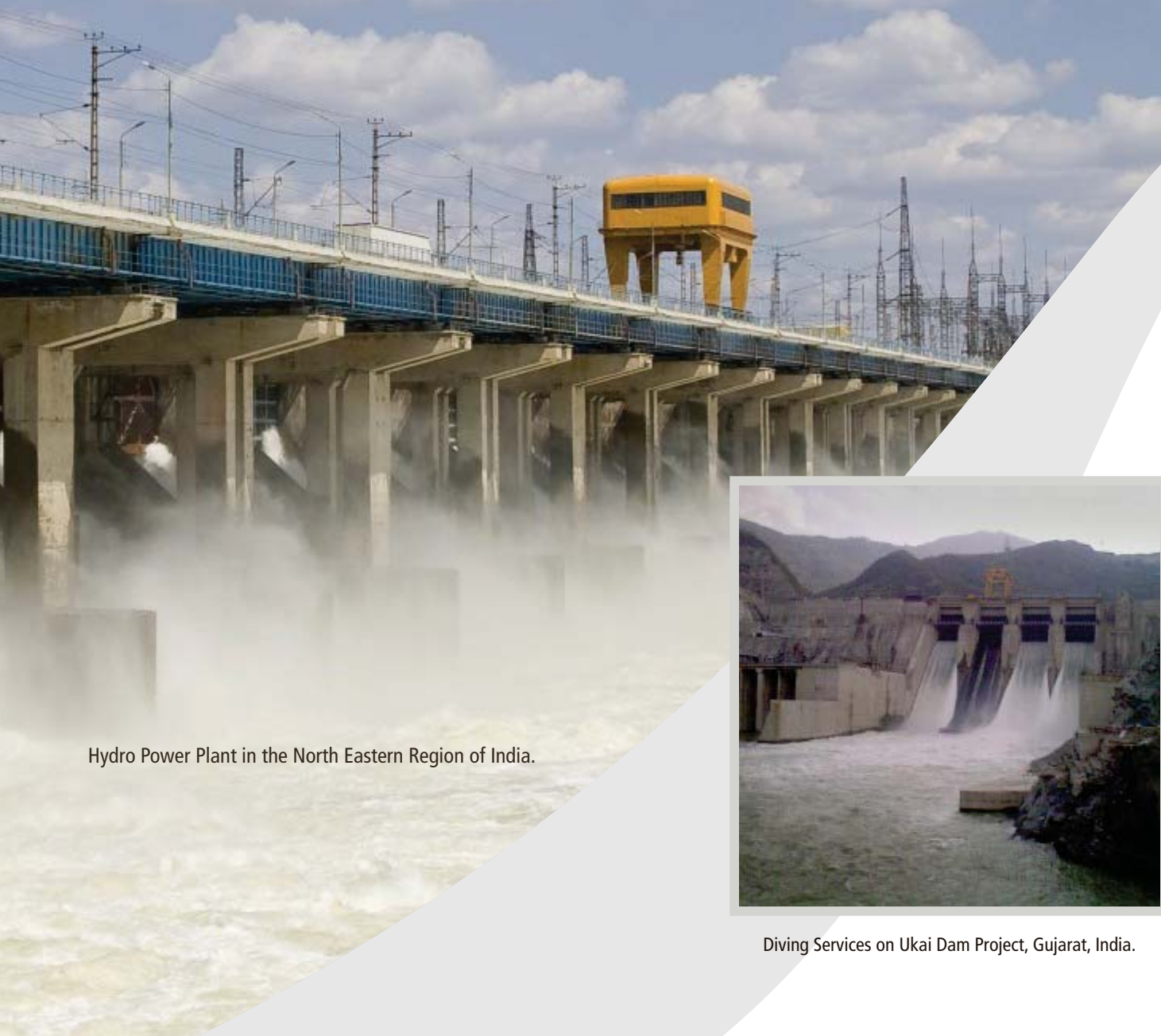
**Nuclear Power Stations & Intake wells**

**Outfall Pipeline, locks, weirs & pumping stations**

**Canal & Irrigation sites**

This includes :

- Repairs & cleaning of Gate grooves, Stop log gate, Penstock gate, etc. on Dam & Hydro Power plants.
- Flood gate recovery and shutter assembling on Dam & Hydro Power Plants.
- Underwater Still Photography & Video Photography (CCTV).
- Underwater cutting and welding.
- Underwater Construction, Maintenance & Repairs of hydro power plants, dams, railway bridges, etc.
- De-silting of Intake Wells, Canal, Pump House, Intake Chamber, etc.
- Underwater corrosion resistant Epoxy coating, Grouting, Reinforcing & Concreting.
- Annual & Periodic survey, maintenance & repairs of Hydro Power Plants, Dams and Irrigation channels.
- De-silting of water reservoir, pipelines, etc.



Hydro Power Plant in the North Eastern Region of India.



Diving Services on Ukai Dam Project, Gujarat, India.



Diving Services on Koteswar Dam Project, Uttarakhand, India.



Diving Services on Tehi Dam Project, Uttarakhand, India.



# Outstanding Marine Salvage Projects

## 'M.V. VIKING STAR'

In a severe cyclone of 1998's in Gujarat, a mini bulk carrier 'M.V. Viking Star' got stranded in a hostile condition approx. 750 mtrs. from the sea shore.

### 'Salvage Agreement – NO CURE – NO PAY'

The marine construction division team was informed and mobilized with team of 4 divers. A temporary cofferdam was built. Excavators were used for trenching a channel with dimension of 800 meter long, 06 meter deep & 25 meter wide. The cofferdam was removed and water entered inside the channel. The heavy duty tractors were used to pull the barge from her grounded position into the channel. Thereafter the vessel moved on her own propulsion from the channel to sea.

## 'MLC NANCY 3'

The tugboat 'MLC Nancy 3' was on transit pulling a barge with consignment but ran into bad weather with choppy sea conditions in the west coast of India. The towing ropes snapped and the barge got into surf before hitting the rocks and broke into 2 halves. On the other hand, the tugboat could not resist the force of nature and drifted along with 4 – 5 meter swells and ran aground.

### 'Salvage Agreement – NO CURE – NO PAY'

SEALORD immediately mobilized the salvage team with 2 tugboats from Mumbai base to make initial preparation before next springtide on chart.

The vessel ran aground and was covered with sand from all sides upto 04 – 05 feet. Excavation started to free the sand around the vessel but with every high tide the sand used to fill back in the excavated area. The salvage team used geo-textile bags to make a wall around the vessel. The plan worked out well with excavation resumed. All towing connections were made and lines secured on the winch of pulling tugboats. The pulling tugboats were at a

distance of 900 meter from the stranded vessel due to shallow draft. Salvage team waited for the springtide on next day. The pulling operation started 30 min. before maximum high tide and the vessel started moving.

## 'DCITUG VI'

The 47 mtr. tugboat 'DCI Tug VI' sank in the adverse conditions with nearest port at a distance of approx. 150 NM.

### 'ISU Contract: Code Name 'Wreckfixed 99'

The challenge was to remove hydrocarbons before removing wreck.

The salvage team with heavily equipped work barge was mobilized from nearest base of Nagapattinam. The work was delayed due to documentation formalities with the statutory authorities. The hydrocarbons (MDO, Oil, Lubricants, etc.) were safely removed as per the International guidelines from the sunken vessel. The wheel house, bridge and funnels were recovered onboard work barge after underwater cutting to have enough draft for the wreck to float in upside down condition. The wreck was afloat upside down once the buoyancy was pumped. The wreck was towed & cleared on 24th April, 2007 with all statutory permission and to the satisfaction of client and all other relevant govt. & local authorities (pollution control board, customs, port, etc.).

## 'ASL PRONTO'

The tugboat 'ASL Pronto' sank during dredging operations in KG Basin. The tugboat was assisting the Cutter Suction Dredger. The vessel sank with approx. 58,000 ltr. of Diesel Oil & 200 ltr. of Lubricating Oil. It was a big environmental hazard and media was keeping a close watch due to the discovery of big gas reserves in KG Basin. The fair weather window was 3 months.

## 'ISU Contract: Code Name 'Wreckstage 99'

SEALORD mobilized a salvage team with crane barge & tugboats from Mumbai base. The work was delayed due to documentation formalities & permissions granted from all statutory authorities. A complicated operation commenced to safely pump the hydrocarbons (MDO, Oil, Lubricants, etc.) from the vessel's various compartments. The recovered oil was collected in barrels and transported back to the shore for further handling & disposal. The vessel was underwater cut into 6 pieces and recovered onboard salvage work-barge. The site was cleared and restored.

## 'CMROV'

The Remote Operated Vehicle (wt. 10mt in air / 100kg in water) got detached from launch & recovery system with tether snapped and ROV lost while lifting operation after trial run due to human error. It was specially designed ROV by SMD, UK for the client and also to mention that it was one of the costliest ROV.

SEALORD salvage team was mobilized on short notice. The ROV drifted from her original sinking position & her beacon signal was too weak to intercept. It was a complicated task with no records of last resting coordinates or position. The salvage team asked the survey team to comb an area of approx. 01 NM with side scan sonar, magnetometer, etc. from her last coordinates on records while sinking. The ROV was found, marked & recovered onboard the mother vessel with LRS.

## 'M.V. NAND APARAJITA'

In unavoidable circumstances in yr. 2010 a loaded (loaded with approx. 1500mt of non degradable cargo: cement) mini bulk carrier 'M.V. Nand Aparajita' carrying a civil construction material consignment for PWD run into heavy sea waves (affecting only part of coastline) and was pushed on sea shore of an island in Lakshadweep. The sea force was so immense that the vessel has heavily rubbed the bottom damaging the corals before getting stranded.

**Environment & Environment Hazard:** The area is very sensitive having live coral & coral reefs. Also, the period was of bird migration.

Vessel carrying approx. 27000 nos. cement bags which is not only highly alkaline but the setting process is exothermic. Any kind of

cement escape in sea from the vessel must have proved hazardous with damage to the coral reefs beyond repairs.

**Media:** The news of vessel grounding was in full swing with every movement of client was noted by the administrator & media. All leading salvors from the world visited the site and suggested the methodology to the client. It was not cost effective as the salvage operation was running into millions of US\$.

SEALORD was contacted by owners to join in for a meeting. SEALORD was not taken to visit the site but with site photographs & teleconferencing, the subject was made to understand & queries were answered. The process for appointing a salvor was delayed due to conditions unknown.

SEALORD was appointed as a salvage contractor.

### 'Salvage Agreement – NO CURE – NO PAY'

SEALORD mobilized a salvage team with OSV from Mumbai base. The work was delayed due to documentation formalities & permissions granted from administration. There was no approach for the vessel from sea (shallow draft, salvage vessel cannot come along side) or land (vessel stranded at 125 mtr. from sea shore). The salvage team completed the approach (bridge) of dimension 120 mtr. long & 2 mtr. wide to the vessel from land by erecting scaffolding. A complicated operation commenced to safely remove the cement & other construction material. The continuous pounding of the sea from sea side made the vessel's shell plate to go weak. All the welding gave way & shell plates starting falling off and the damage was beyond repairs. SEALORD abandoned the salvage operation as saving the vessel was out of question.

The owners were informed; the owners requested SEALORD to keep the main approach (bridge) to the vessel to atleast remove the cement bags. The infrastructure built by SEALORD was very helpful for the owners, the administrator, underwriters, insurance co., etc. to make further assessment of the damage to the environment & vessel.

Even after having a heavy commercial loss in this project, SEALORD considered this as a successful project because the main purpose of saving the environment from any further damage as all cement bags were removed was successfully achieved.



'M.V. Viking Star' Salvage Site.



'DCI Tug VI' Wreck Removal Site.



'ASL Pronto' Wreck Removal Site.



'M.V. Nand Aparajita' Re-floating Site.



# EQUIPMENT PROFILE

## Salvage & Diving Equipment

SEALORD's salvage & diving equipment is held for immediate deployment at SEALORD's warehouses & workshops in & around Mumbai & Navi Mumbai, India. From its main base, SEALORD operates one of the most extensive salvage & diving response equipment available.

### The major equipment & machinery includes:

- Generator sets
- LP/HP Diving Compressors
- De-compression Chambers (DNV certified)
- Zodiacs / boats / launches
- Side scan sonar / magnetometers
- Anti-oil pollution equipment (booms, skimmers, oil dispersants, etc.)
- Submersible pumps of all sizes (electric & hydraulic driven)
- Heavy duty submersible slurry / sludge pumps of all sizes (electric & hydraulic driven)
- Dredge pumps of all sizes (hydraulic driven)
- Underwater NDT equipment
- Welding & Cutting sets (surface & underwater)
- Diving sets, equipment, machinery, control systems, etc. (shallow & deep dive spread)
- Communication sets (surface & underwater)
- Underwater video & photo cameras
- Mini ROVs up to 100m (subsea survey & inspection)
- Rigging & patching equipment all sizes (heavy & light)
- Buoyancy & Roller Air Bags all sizes
- Winches up to 65 tonnes (hydraulic / diesel driven)





# CUSTOMER PROFILE

SEALORD Salvage serves to meet the needs of customers from the Marine Salvage, Offshore Oil & Gas and Marine Construction. The company provides most advance, immediate & effective response and cost-effective solutions to fulfill customer's requirements. The company offers round-the-clock services in any part of the country and is capable of providing its services at all major ports, harbours, offshore, coastal areas, inland, etc. and can mobilize the experts & diving teams at very short notice anywhere in the country.



## Our Customers are :

Ship Owners

Ship managers / operators

Hull & machinery underwriters

Protection & Indemnity Clubs

Oil & Gas companies, producers & operators

Offshore field operators

Offshore & Marine engineering contractors

Drill rig & vessel operators

Government & local authorities

Cargo owners & underwriters

## Our Principal Clients are :

### • Protection & Indemnity Clubs



The Shipowners Mutual P&I Association  
Luxembourg Office



North of England P&I Association  
Hong Kong Office



STEAMSHIP MUTUAL  
Steamship Mutual P&I Association  
London Office

### • Offshore Field Operators, Oil & Gas Companies, Producers & Operators, Marine Construction & Engineering



Allseas Marine Contractors SA



Boskalis bv

Boskalis



E-Marine PJSC



ONGC



Aban Offshore



Frontier Drilling AS



HCC



Great Eastern Shipping



Punj Lloyd



Larsen & Toubro Ltd.



Tag Offshore



Great Offshore

### • Ship Owners, Managers / Operators



Shipping Corporation of India



Dredging Corporation of India



Essar Group



ABG Shipyard



IRISL



MLC Marine Pte. Ltd.



Capitol Offshore Pte. Ltd.



Mercator Lines

### • Nuclear Power Stations, Hydro Power Plants, Dams & Intake Wells



RGPP



UPL



GSECL



NPCIL



*Here People Dive Deep  
to Serve Better !*



## **M/s. SEALORD DIVING & SALVAGE PVT. LTD.**

Plot No. D - 222 / 34, T.T.C., M.I.D.C.,  
Industrial Area, Shiravane,  
Off Thane - Belapur Road,  
Nerul (East), Navi Mumbai - 400 706.  
Maharashtra, India.

**Email :** [info@sealordsalvage.com](mailto:info@sealordsalvage.com)

**Telephone No.** : +91 22 2768 2825  
**Tele-Fax No.** : +91 22 2768 2826  
**Mobile No.1** : +91 97 6990 0765  
**Mobile No.2** : +91 98 3341 3650  
**Mobile No.3** : +91 98 1989 0721

**Web. :** [www.sealordsalvage.com](http://www.sealordsalvage.com)