

(including Flexible Hose & Portable Pump Inventory)

Vessel: MV/ MT		
IMO Number:		
From:	To:	



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The V.Ships Group aims to be recognized as the first choice global supplier of the highest quality services to the shipping industry with absolute regard for safety and the marine environment.

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#### Overview

A MARPOL SECURITY SEAL System is in place on certain valves and pipe flanges to prevent unauthorised operation or removal.

- The Master and Chief Engineer must jointly approve any seal removal except in an emergency.
- If you see a broken or missing seal the Chief Engineer <u>must</u> be advised immediately.
- If you damage or break a seal by mistake, you must immediately report this to the Chief or Second Engineer





#### **Instructions**

- 1. Numbered seals are to be installed on flanges and valves to prevent unauthorized connection to and illegal discharge through piping systems within the engine-room, machinery spaces and deck connections as appropriate.
- 2. The initial supply of seals (both metal and / or plastic) with unique numbers shall normally be made by the V.Ships Ship Management Office (SMO) or as per instructions from the SMO. The vessel may be asked to raise a requisition for the same. Additional seals with unique numbers shall be ordered by the vessel in the usual manner by raising a requisition.
- 3. The systems that require seals include:
  - Oily bilge and sludge system flanges and valves.
  - Emergency bilge suction valves. (breakable seals are to be used)
  - Bilge main cross-over connections to fire or GS pumps. (breakable seals are to be used)
  - Sewage system flanges and valves.
  - All Engine and Deck Portable Pumps and Hoses \*
  - Any other blank flanges, connections, removable pipe connection that could reasonably use to discharge oily water or sludge overboard.
  - \*Portable pumps and hoses must be fitted with a seal that prevents the pump or hose being used without removing a seal. This could be either by securing the pump or hose to a fixed part of the ship or fitting a blank that has a seal.
- 4. The seals must not be reusable. They must be uniquely numbered and of adequate strength, particularly if used in an exposed area.
- 5. The seals must be breakable if fitted on an emergency valve. (Breakable means when moderate force is applied the seal will break)
- 6. For accuracy, seals are to be used in their numerical order. (Do not pick-up a seal randomly)
- 7. A drawing of each system required to be fitted with the seals is to be prepared, and a number assigned to each flange.

  These drawings should be attached at the back of this book for reference. (See last pages in this log book for examples)



- 8. Marpol Security Seal Log Book must be maintained by the Chief Engineer Officer.
- 9. Each time a seal is affixed or removed, the log book should be updated including the date, time, seal number removed or affixed, person involved and the reason for removal or replacement.

  (Accuracy as with other environmental records, is critical)
- 10. A new line is to be used for each seal fitting & removal.
- 11. The Rank and Name of the person who removes/replaces the seal must be entered into the log and the Chief Engineer and Master must counter-sign, verifying the placement, removal or replacement of the seal.
- 12. If the valves are remotely operated from the ECR, the associated push button must be unable to be used without breaking a seal and a suitable sign must be posted near the associated push button or switches stating "Emergency use only".
- 13. The Master shall retain the replacement (new) seals under his control in a secure location and a record of unused seals must be included in Master's handover notes.
- 14. Used seals are to be retained and kept separately, for future reference and evidence.

#### Caution:

It is prohibited to use cross connections from engine room bilge mains to the suction piping of larger pumps, which may be referred to as the "fire and general service pump" or "fire, bilge and ballast pump"; and usage of these crossovers is similar to bypassing the OWS equipment and is strictly prohibited, except in the case of an emergency. This also includes crossover connections to educator systems capable of pumping out bilge wastes.



#### Section 1 - Record of Seals Received

P.O. Ref	Date Received	Port Received	Seal Number Range	Metal (M) or Plastic (P)	Total seals Received	Comments
<u>EXAMPLE</u>						
1234 -00123	23.10.13	Hamburg	123456700 - 123456759	M	60	Seals retained by Master



P.O. Ref	Date Received	Port Received	Seal Number Range	Metal (M) or Plastic (P)	Total seals Received	Comments



P.O. Ref	Date Received	Port Received	Seal Number Range	Metal (M) or Plastic (P)	Total seals Received	Comments



## **Section 2 - Record of Seals in Use**

Entry		Unique	Seal		Fitted				Remo	oved	Comments / New Seal	C.Eng	Master
No.	System	Flange No.	Number	Date	Time	Rank/ Name	Date	Time	Rank/ Name	Reason	Entry No.	initials	initials
<u>EXAMPLE</u>	[												
001	OWS	22	123456700	23.01.13	14.30	2/E	05.01. 14	10.00	3/E	maintenance	Replaced by entry 03		
002	Sewage	03	123456701	13.06.13	16.00	2/E							
003	OWS	22	123456702	05.01.14	11.00	3/E							
		T		ı	1	1	ı	ı	1	T	T	1	



Entry		Unique	Seal		Fitted				Remo	oved	Comments / New Seal	C.Eng	Master
No.	System	Unique Flange No.	Number	Date	Time	Rank/ Name	Date	Time	Rank/ Name	Reason	Entry No.	C.Eng initials	initials



Entry		Unique	Seal		Fitted				Remo	oved	Comments / New Seal	C.Eng	Master
No.	System	Unique Flange No.	Number	Date	Time	Rank/ Name	Date	Time	Rank/ Name	Reason	Entry No.	initials	initials



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# **Section 3 – Flexible Hose and Portable Pump Inventory**

A hose inventory log is to be maintained for all Engine and Deck portable pumps and hoses. This is in order to ensure hoses are only used for the intended purpose. It will also assist in port state control inspections as inspectors tend to be suspicious of any flexible hose that could be used for illegal discharge. Each

item is to be assigned a unique number which is to be marked or attached to the hose or pump. (First item is example)

	Storage		Dimensions			Primary Use,		Fitted		R	emove	ed	s S	-s
Entry No.	Location L=locked, U=Unlocked	Material	(Length / Diameter)	Flange / Connections	Seal Number	HP / LP, Discharge /Suction / Supply	Date	Time	Rank	Date	Time	Rank	C.Eng initials	Master initials
001	Bosun's store (L)	Rubber compound	20m, OD 30mm	Standard air hose connection each end	123456710	Deck Equip Air Hose HP / Supply	13.01.14	14.00	3/0	21.01.14	11.00	3/0		



	Storage		Dimensions			Primary Use,		Fitted		R	emove	ed	g Is	r S
Entry No.	Location L=locked, U=Unlocked	Material	(Length / Diameter)	Flange / Connections	Seal Number	HP / LP, Discharge /Suction / Supply	Date	Time	Rank	Date	Time	Rank	C.Eng initials	Master initials



	Storage		Dimensions			Primary Use,		Fitted		R	emove	ed	s	- s
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	Storage		Dimensions			Primary Use,		Fitted		R	emove	ed	g Is	r S
Entry No.	Location L=locked, U=Unlocked	Material	(Length / Diameter)	Flange / Connections	Seal Number	HP / LP, Discharge /Suction / Supply	Date	Time	Rank	Date	Time	Rank	C.Eng initials	Master initials



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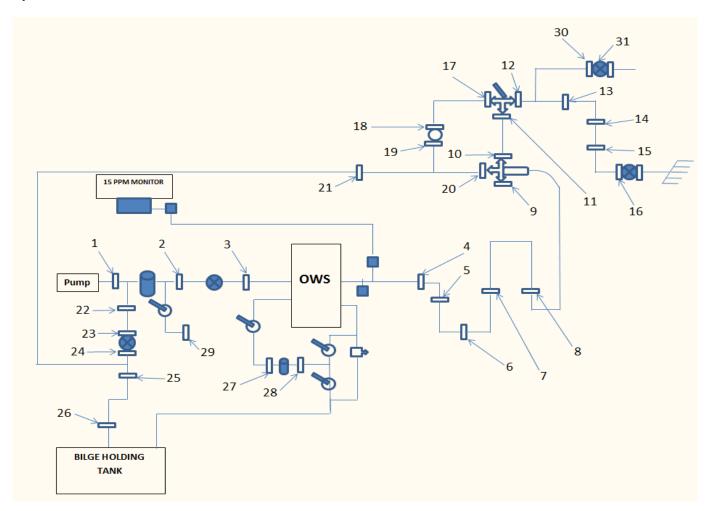
	Storage		Dimensions			Primary Use,		Fitted		R	emove	ed	s	- s
Entry No.	Location L=locked, U=Unlocked	Material	(Length / Diameter)	Flange / Connections	Seal Number	HP / LP, Discharge /Suction / Supply	Date	Time	Rank	Date	Time	Rank	C.Eng initials	Master



	Storage		Dimensions			Primary Use,		Fitted		R	emove	ed	s Is	S
Entry No.	Location L=locked, U=Unlocked	Material	(Length / Diameter)	Flange / Connections	Seal Number	HP / LP, Discharge /Suction / Supply	Date	Time	Rank	Date	Time	Rank	C.Eng initials	Master initials

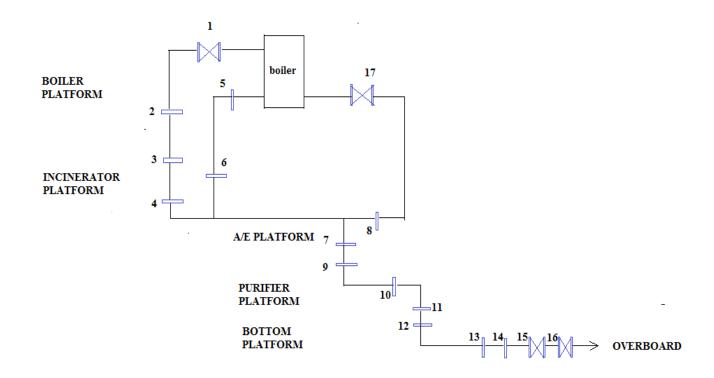
# **Section 4 – Sample Drawings**

# Oily Water Separator - OWS



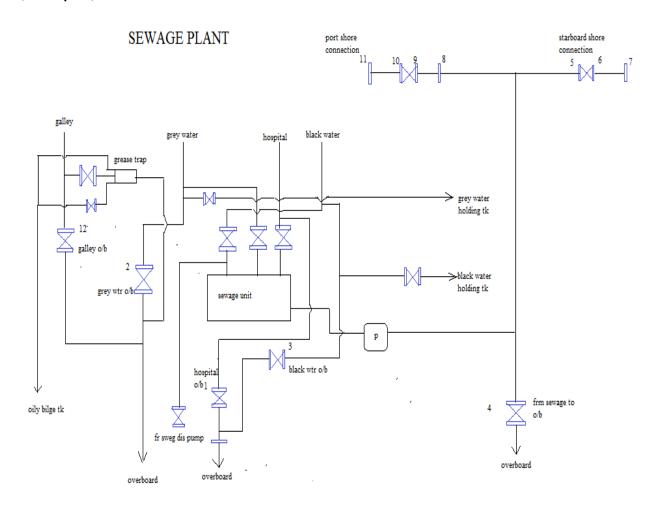


# Boiler Blow-Down (sample)





# Sewage Plant (sample)





# **Section 5 - Ship Specific System Drawings**

System: .....



C۱	/stem:																					
J	yotanı.	٠		•	٠	٠	•	٠	٠	•	•	 ٠	٠	٠	٠	•	•	 •	•	•	٠	•



System:	
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System:	
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System:	
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C۱	/stem:																								
J	yotanı.	٠	 •	٠	٠	٠	٠	٠	•	٠.	•	٠	٠	٠	٠	•	•	•	٠	٠	٠	٠	•	٠.	



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J	yotanı.	٠	 •	٠	٠	٠	٠	٠	•	٠.	•	٠	٠	٠	٠	•	•	•	٠	٠	٠	٠	•	٠.	



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J	yotanı.	٠	 •	٠	٠	٠	٠	٠	•	٠.	•	٠	٠	٠	٠	•	•	•	٠	٠	٠	٠	•	٠.	



C۱	/stem:																								
J	yotanı.	٠	 •	٠	٠	٠	٠	٠	•	٠.	•	٠	٠	٠	٠	•	•	•	٠	٠	٠	٠	•	٠.	